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MEMORANDUM

INVESTIGATION OF THE PRESSURE DISTRIBUTION OVER A MODEL OF AN INTERCONTINENTAL BALLISTIC MISSILE FOR SEVERAL NOSE SHAPES AT MACH NUMBERS OF 1.57, 2.29, 2.98, 3.96, AND 4.65

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INVESTIGATION OF THE PRESSURE DISTRIBUTION OVER A MODEL OF AN INTERCONTINENTAL BALLISTIC MISSILE FOR SEVERAL NOSE SHAPES AT MACH NUMBERS OF 1.57, 2.29, 2.98, 3.96, AND 4.65*

By John G. Presnell, Jr., and James D. Church

SUMMARY

An investigation of the pressure distribution over a model of an intercontinental ballistic missile has been conducted in the Langley Unitary Plan wind tunnel. Data were obtained for five nose shapes at Mach numbers of 1.57, 2.29, 2.98, 3.96, and 4.65 at a Reynolds number per foot of approximately 4.5×10^6 at $M = 1.57$ and 3.8×10^6 at the other Mach numbers. Included in the results are boundary-layer characteristics of the noses and the base of the model which were measured with rakes. Data were obtained with both natural and fixed transition for three nose shapes. Tests were conducted over an angle-of-attack range from approximately -10° to 10° at about 0° angle of sideslip. The data are listed in pressure-coefficient form and presented with schlieren photographs without analysis.

INTRODUCTION

Pressure-distribution tests, including boundary-layer measurements, of a model of an intercontinental ballistic missile (ICBM) have been conducted at the Langley Unitary Plan wind tunnel.

During its period of flight in the atmosphere (ascent and descent), an ICBM is subjected to high airloads and temperatures because of surrounding atmosphere and extreme airspeeds. In designing such a missile for minimum weight with maximum performance, an accurate knowledge of the viscous heating and airloads encountered is essential.

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The purpose of the present tests was to obtain pressure-distribution and boundary-layer data on an ICBM model in order to predict more accurately the airloads to be encountered and to aid in the evaluation of heat-transfer information. Tests were made at Mach numbers of 1.57, 2.29, 2.98, 3.96, and 4.65 through an angle-of-attack range from approximately -10° to 10° at about 0° angle of sideslip.

SYMBOLS

C_p	pressure coefficient, $\frac{p_l - p}{q}$
q	free-stream dynamic pressure, lb/sq ft
p	free-stream static pressure, lb/sq ft
p_l	measured pressure at each orifice, lb/sq ft
M	free-stream Mach number
α	angle of attack referred to missile center line, deg
β	angle of sideslip referred to missile center line, deg
l	reference model length, in.
x	distance from model station 0 to center of each particular orifice measured along model center line, in.
y	distance from model surface outboard to center of particular rake orifice, in.
θ	angular location of orifices about model center line ($\theta = 0^{\circ}$ at top of model, increasing clockwise facing downstream), deg

APPARATUS AND MODEL

The tests were conducted in both the high and low Mach number test sections of the Langley Unitary Plan wind tunnel. Tests were made in the low Mach number test section at $M = 1.57$ and in the high Mach number test section from $M = 2.29$ to 4.65. This tunnel is of the variable-pressure, return-flow type with two test sections measuring 4 feet square

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and approximately 7 feet long. Mach number may be varied continuously from approximately 1.5 to 2.9 in the low Mach number test section and from 2.3 to 4.7 in the high Mach number test section by means of asymmetric sliding-block nozzles.

Each test section has a central support system consisting of a variable-angle sting support which rides on a horizontal strut. This remotely operated sting support may be traversed across the strut as well as being varied in angle with respect to the relative wind. This allows the model to be positioned near the center of the test section at all angles of attack in order to reduce the likelihood of wall-reflected shock waves striking the model.

The model consisted of five interchangeable nose shapes attached to a cylindrical secondary rocket stage which in turn was attached to a larger first-stage rocket. (See fig. 1 for details and dimensions and fig. 2 for photographs.) The model was mounted to the test-section central support system by a sting from the base of the first-stage rocket. The instrumentation of the model consisted of 265 pressure orifices including 4 rakes for boundary-layer measurements having a total of 40 tubes. The base of the model was equipped with two manifolds: One measured base pressure ($x/l = 1.00$) and the other measured sting-cavity pressure ($x/l = 0.921$). The orifice locations of the model instrumentation are illustrated in figure 1.

Pressure tubes led from the model instrumentation through the sting and permanent test-section pressure instrumentation to liquid manometers outside the test section. Manometer readings were recorded photographically.

Two manometer fluids were utilized; rake pressures and pressures at the first five orifices at $\theta = 180^{\circ}$ were measured with mercury-filled manometers and pressures at all other orifices were measured with alkazene-filled manometers.

TESTS

Tests were made through an angle-of-attack range from approximately -10° to 10° at 0° angle of sideslip.

The test conditions of Mach number, stagnation and dynamic pressure, and Reynolds number per foot are listed in the following table:

[redacted]

M	Static pressure, lb/sq ft	Dynamic pressure, q, lb/sq ft	Reynolds number per ft
1.57	587.4	1,013	4.47×10^6
2.29	231.5	852	3.77
2.98	116.2	720	3.77
3.96	50.5	555	3.78
4.65	28.7	436	3.79

All configurations were tested at $M = 1.57$, and those considered to be of the most interest were tested at the other Mach numbers.

In order to determine the effect of fixing boundary-layer transition on the pressure distribution, transition strips 3/16 inch wide of No. 180 carborundum grains imbedded in Krylon were placed around the nose as shown in figures 1(b) and 1(c) for noses I, II, and III.

In order to prevent adverse condensation effects, the dewpoint temperature for all tests was maintained below -30° F except at $M = 4.65$ where it was maintained below -20° F. The stagnation temperature was maintained at 150° F for $M = 1.57$, 2.29, and 2.98 and at 175° F for $M = 3.96$ and 4.65.

PRESENTATION OF RESULTS

The results have been plotted and orifice readings which were obviously in error have been deleted. Rake data were obtained simultaneously with the overall pressure distribution and slight interference effects of the rakes appear.

The data are presented for angles of attack of ±10.1°, ±6.3°, ±3°, and 0° with the model oriented so that the orifices located along $\theta = 180°$ measured positive pressures with positive angle of attack. In utilizing the data, a more complete pressure distribution may be obtained by combining data obtained with positive and negative angles of attack of equal magnitude.

Typical schlieren photographs are presented in figure 3; the tabulated pressure coefficients are presented in the following figures and tables:

[redacted]

Nose	M	Transition	Table number
I	1.57	Natural	1
		Fixed	2
	2.98	Fixed	3
II	1.57	Natural	4
		Fixed	5
III	1.57	Natural	6
	2.29		7
	2.98		8
	3.96		9
	4.65		10
	1.57	Fixed	11
	2.29		12
	2.98		13
	3.96		14
	4.65		15
IV	1.57	Natural	16
	2.29		17
	2.98		18
	3.96		19
	4.65		20
V	1.57	Natural	21
	2.29		22
	2.98		23
	3.96		24
	4.65		25

CORRECTIONS AND ACCURACY

Tunnel calibrations indicate that some flow angularity exists in both test sections. For the present investigation the model was oriented so that measurable angularity existed only in the angle-of-sideslip plane. All tests were conducted at 0° geometric sideslip angle; hence, the absolute value of this angle corresponds to the flow angularities listed as follows:

[redacted]

M	β, deg
1.57	-0.4
2.23	-.4
2.98	-.2
3.96	-.5
4.65	-.9

The angles of attack have been corrected for deflections of the model-sting combination under static load and are accurate to ±0.1°.

Random pressure-coefficient errors encountered in data processing are about $\pm 0.005C_p$. Inherent errors in pressure coefficients arise in testing because of the variation of local Mach number in that part of the test section occupied by the model. These errors affect the determination of static pressure p and dynamic pressure q from Mach number and a measured stagnation pressure. Local Mach numbers from this investigation vary about ±0.015 from the values listed in the preceding table. An indication of the effect of this Mach number variation on pressure coefficients is given in the following table:

M	C_p	ΔC_p
1.57	1.564	0.018
	1.000	.015
	.502	.014
	.050	.012
2.98	1.765	.026
	.994	.016
	.501	.010
	.050	.005
4.65	1.801	.024
	.989	.014
	.501	.007
	.050	.002

[redacted]

At a Mach number of 1.57 for all configurations at angles of attack of $\pm 6.3^{\circ}$ and $\pm 10.1^{\circ}$ wall-reflected shock waves impinged on the rear of the model invalidating the data presented for values of x/l greater than 0.90, including the base boundary-layer rakes.

Langley Research Center,
National Aeronautics and Space Administration,
Langley Field, Va., October 2, 1958.

[redacted]

TABLE 1. - PRESSURE COEFFICIENTS FOR AN INTERCONTINENTAL BALLISTIC MISSILE FOR NOSE I WITH NATURAL TRANSITION AT M = 1.57

(a) $\alpha = -10.1^{\circ}$

Model station, $\frac{x}{l}$	Cp for meridian angle, θ, deg –									Model station, $\frac{x}{l}$
	0	90	105	120	150	165	180	225	270	
-.055							1.554			-.055
-.037							.145			-.037
-.018							.115			-.018
.002							.079			.002
.021							.038			.021
.041							.015			.041
.060		.042	.000	-.023	-.015	-.009	-.008			.060
.075	.275	.053	.014	.006	.008	.015	.024	.033		.075
.085	.313	.094	.054	.054	.064	.071	.067	-.001	.011	.085
.096	.393									.096
.126		.101	.065	.048	.053	.055	.063	.054	.090	.126
.143							-.210			.143
.154	-.003	-.169	-.190	-.200	-.190	-.179	-.173	-.209		.154
.171							-.142			.171
.189							-.112			.189
.206	.021	-.150	-.164	-.165	-.108	-.094	-.087	-.128		.206
.223							-.062			.223
.241							-.047			.241
.258	.025	-.152	-.155	-.126	-.066	-.044	-.035	-.078	-.150	.258
.275							-.027			.275
.293							-.019			.293
.310	.025	-.147	-.135	-.087	-.049	-.026	-.007	-.056	-.144	.310
.327							-.000			.327
.344							-.003			.344
.362	.017	-.134	-.098	-.056	-.051	-.025	.000	-.045	-.123	.362
.379							.001			.379
.396	.016	-.121	-.090	-.048	-.051	-.024	.010	-.041	-.109	.396
.408							.002			.408
.426	.237	.074	.097	.084	.061	.158	.251	.087	.093	.426
.451	.219	.071	.060	.075	.059	.108	.161		.071	.451
.476	.213	.048	.042	.063	.039	.082	.110	.076	.055	.476
.501	.204	.040	.035	.046	.021	.067	.091	.050	.047	.501
.530	-.004	-.132	-.138	-.113	-.087	-.133	-.110	-.076	-.128	.530
.548							-.123			.548
.566							-.096			.566
.584	.030	-.120	-.106	-.084	-.092	-.091	-.055	-.074	-.115	.584
.602							-.053			.602
.620							-.044			.620
.638	.048	-.107		-.082	-.053				-.102	.638
.655							-.029			.655
.673							-.024			.673
.691	.033	-.121	-.109	-.071	-.045	-.049	-.023	-.035	-.099	.691
.709							-.019			.709
.727							-.022			.727
.745	.034	-.120		-.054	-.037		-.019		-.089	.745
.763							-.018			.763
.781							-.028			.781
.799							-.021			.799
.817	.042	-.102	-.070	-.041	-.035	-.031	-.009	-.024	-.075	.817
.834							-.016			.834
.852							-.007			.852
.870							-.008			.870
.888							-.009			.888
.906							-.003			.906
.921	-.224									.921
.924	.041	-.075		-.031	-.031		-.002		-.071	.924
.947							-.002			.947
.964							.016			.964
.981	.087	-.065	-.028		-.013	-.004	.015	-.010	-.050	.981
1.000	-.230									1.000

Nose rake			Base rake		
Orifice station, y, in.	Cp top	Cp side	Orifice station, y, in.	Cp top	Cp side
.010	1.490	.784	.031	.880	.423
.030	1.648	1.480	.094	1.593	1.057
.050	1.703	1.702	.156	1.670	1.531
.070	1.719	1.704	.219	1.594	1.620
.090	1.728	1.609	.281	1.597	1.493
.110	1.740	1.557	.344	1.589	1.469
.130	1.733	1.557	.406	1.590	1.492
.150	1.724	1.550	.469	1.595	1.485
.170	1.705	1.536	.750	1.581	
.190	1.619	1.438	1.000	1.582	
			1.250	1.575	
			1.500	1.568	

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TABLE 1. - PRESSURE COEFFICIENTS FOR AN INTERCONTINENTAL BALLISTIC MISSILE FOR NOSE I WITH NATURAL TRANSITION AT M = 1.57 - Continued

(b) $\alpha = -6.3^{\circ}$.

Model station, $\frac{x}{l}$	Cp for meridian angle, θ, deg –									Model station, $\frac{x}{l}$
	0	90	105	120	150	165	180	225	270	
-.055							1.555			-.055
-.037							.199			-.037
-.018							.162			-.018
.002		.204					.123	.147		.002
.021							.069			.021
.041							.046			.041
.060		.072	.046	.025	.019	.019	.019			.060
.075	.205	.090	.070	.056	.044	.044	.050	.074		.075
.085	.240	.136	.110	.110	.105	.102	.094	.073	.117	.085
.096	.323									.096
.126		.139	.119	.102	.096	.090	.091	.106	.132	.126
.143							-.194			.143
.154	-.055	-.137	-.149	-.160	-.169	-.166	-.159	-.165		.154
.171							-.141			.171
.189							-.112			.189
.206	-.022	-.103	-.110	-.125	-.100	-.091	-.091	-.108		.206
.223							-.063			.223
.241							-.047			.241
.258	-.012	-.091	-.092	-.079	-.049	-.037	-.035	-.054	-.087	.258
.275							-.030			.275
.293							-.023			.293
.310	-.007	-.069	-.065	-.052	-.031	-.018	-.015	-.032	-.069	.310
.327							-.012			.327
.344							-.008			.344
.362	-.006	-.057	-.050	-.034	-.018	-.006	-.001	-.021	-.055	.362
.379							-.003			.379
.396	-.008	-.054	-.046	-.031	-.014	-.006	.003	-.016	-.050	.396
.408							.020			.408
.426	.208	.142	.150	.143	.134	.152	.170	.138	.145	.426
.451	.190	.129	.119	.115	.118	.125	.141		.122	.451
.476	.182	.105	.096	.096	.098	.104	.114	.101	.104	.476
.501	.173	.093	.086	.079	.067	.077	.093	.078	.093	.501
.530	-.027	-.092	-.101	-.107	-.082	-.088	-.098	-.079	-.094	.530
.548							-.074			.548
.566							-.060			.566
.584	-.002	-.075	-.073	-.065	-.066	-.065	-.053	-.059	-.071	.584
.602							-.044			.602
.620							-.036			.620
.638	.000	-.056		-.051	-.040				-.058	.638
.655							-.020			.655
.673							-.019			.673
.691	.003	-.061	-.058	-.049	-.031	-.030	-.008	-.026	-.053	.691
.709							-.014			.709
.727							-.006			.727
.745	.006	-.054		-.033	-.021		-.010		-.043	.745
.763							-.007			.763
.781							-.014			.781
.799							-.004			.799
.817	.017	-.043	-.036	-.026	-.015	-.009	.004	-.010	-.025	.817
.834							-.002			.834
.852							.007			.852
.870							.008			.870
.888							.007			.888
.906							.012			.906
.921	-.173									.921
.924	.030	-.028		-.016	-.005		.012		-.039	.924
.947							.011			.947
.964							.020			.964
.981	.061	-.017	-.007		.017	.031	.048	.004	-.021	.981
1.000	-.178									1.000

Nose rake			Base rake		
Orifice station, y, in.	C_p top	C_p side	Orifice station, y, in.	C_p top	C_p side
.010	1.384	.949	.031	.752	.541
.030	1.605	1.531	.094	1.330	.971
.050	1.689	1.701	.156	1.623	1.331
.070	1.712	1.705	.219	1.596	1.555
.090	1.725	1.657	.281	1.574	1.563
.110	1.730	1.619	.344	1.575	1.530
.130	1.722	1.602	.406	1.574	1.536
.150	1.710	1.591	.469	1.581	1.540
.170	1.689	1.567	.750	1.573	
.190	1.595	1.462	1.000	1.572	
			1.250	1.562	
			1.500	1.565	

[redacted]

TABLE 1. - PRESSURE COEFFICIENTS FOR AN INTERCONTINENTAL BALLISTIC MISSILE FOR NOSE I WITH NATURAL TRANSITION AT M = 1.57 - Continued

(c) $\alpha = -3.0^{\circ}$

Model station, $\frac{x}{l}$	Cp for meridian angle, θ, deg –									Model station, $\frac{x}{l}$
	0	90	105	120	150	165	180	225	270	
-.055							1.556			-.055
-.037							.254			-.037
-.018							.217			-.018
.002		.220					.172	.189		.002
.021							.109			.021
.041							.081			.041
.060		.089	.075	.057	.052	.049	.048			.060
.075	.163	.107	.099	.090	.075	.073	.078	.095		.075
.085	.188	.158	.143	.147	.139	.132	.122	.128	.168	.085
.096	.326									.096
.126		.162	.152	.138	.130	.124	.123	.136	.151	.126
.143							-.178			.143
.154	-.094	-.119	-.131	-.139	-.149	-.147	-.141	-.145		.154
.171							-.123			.171
.189							-.101			.189
.206	-.051	-.080	-.082	-.095	-.084	-.081	-.083	-.086		.206
.223							-.064			.223
.241							-.055			.241
.258	-.034	-.054	-.057	-.056	-.050	-.044	-.048	-.048	-.050	.258
.275							-.039			.275
.293							-.032			.293
.310	-.024	-.035	-.039	-.033	-.027	-.017	-.017	-.025	-.038	.310
.327							-.011			.327
.344							-.010			.344
.362	-.012	-.029	-.021	-.013	-.014	-.009	-.008	-.011	-.026	.362
.379							-.010			.379
.396	-.013	-.018	-.019	-.020	-.012	-.007	-.000	-.013	-.019	.396
.408							.017			.408
.426	.190	.172	.172	.170	.164	.170	.168	.185	.169	.426
.451	.171	.154	.149	.147	.147	.144	.147		.146	.451
.476	.158	.134	.128	.127	.118	.117	.119	.126	.132	.476
.501	.142	.120	.114	.103	.099	.096	.099	.109	.121	.501
.530	-.053	-.073	-.079	-.082	-.079	-.080	-.079	-.074	-.076	.530
.548							-.064			.548
.566							-.052			.566
.584	-.022	-.048	-.050	-.052	-.054	-.054	-.047	-.045	-.048	.584
.602							-.035			.602
.620							-.032			.620
.638	-.009	-.034		-.028	-.028				-.034	.638
.655							-.021			.655
.673							-.021			.673
.691	-.010	-.028	-.028	-.029	-.031	-.027	-.015	-.022	-.021	.691
.709							-.015			.709
.727							-.012			.727
.745	-.004	-.026		-.022	-.013		-.004		-.014	.745
.763							-.007			.763
.781							-.007			.781
.799							-.004			.799
.817	.008	-.015	-.011	-.010	-.009	-.004	.000	-.003	.000	.817
.834							-.002			.834
.852							.003			.852
.870							.005			.870
.888							.009			.888
.906							.006			.906
.921	-.101									.921
.924	.002	-.004		-.010	.003		.010		-.013	.924
.947							.011			.947
.964							.013			.964
.981	.050	.011	.008		.008	.007	.007	.004	-.002	.981
1.000	-.105									1.000

Nose rake			Base rake		
Orifice station, y, in.	C_p top	C_p side	Orifice station, y, in.	C_p top	C_p side
.010	.930	.598	.031	.648	.549
.030	1.386	1.235	.094	1.041	.823
.050	1.646	1.634	.156	1.341	1.057
.070	1.729	1.721	.219	1.530	1.279
.090	1.753	1.728	.281	1.566	1.443
.110	1.746	1.690	.344	1.583	1.525
.130	1.728	1.621	.406	1.574	1.560
.150	1.702	1.592	.469	1.576	1.564
.170	1.669	1.570	.750	1.569	
.190	1.558	1.472	1.000	1.569	
			1.250	1.571	
			1.500	1.565	

[redacted]

TABLE 1. - PRESSURE COEFFICIENTS FOR AN INTERCONTINENTAL BALLISTIC MISSILE FOR NOSE I WITH NATURAL TRANSITION AT M = 1.57 - Continued

(d) $\alpha = 0^{\circ}$

Model station, $\frac{x}{l}$	Cp for meridian angle, θ, deg –									Model station, $\frac{x}{l}$
	0	90	105	120	150	165	180	225	270	
-.055							1.553			-.055
-.037							.305			-.037
-.018							.266			-.018
.002							.217			.002
.021							.150			.021
.041							.116			.041
.060		.092	.090	.079	.085	.085	.084			.060
.075	.118	.113	.117	.113	.109	.109	.114	.116		.075
.085	.142	.166	.160	.173	.176	.170	.158	.175	.184	.085
.096	.271									.096
.126		.169	.168	.164	.166	.162	.162	.164	.161	.126
.143							-.157			.143
.154	-.122	-.116	-.120	-.122	-.124	-.125	-.119	-.129		.154
.171							-.106			.171
.189							-.088			.189
.206	-.071	-.072	-.069	-.080	-.072	-.071	-.072	-.073		.206
.223							-.056			.223
.241							-.048			.241
.258	-.043	-.043	-.044	-.043	-.040	-.037	-.041	-.041	-.038	.258
.275							-.039			.275
.293							-.036			.293
.310	-.028	-.021	-.024	-.023	-.032	-.028	-.026	-.026	-.025	.310
.327							-.021			.327
.344							-.013			.344
.362	-.012	-.019	-.016	-.011	-.012	-.008	-.007	-.010	-.017	.362
.379							-.010			.379
.396	-.013	-.009	-.009	-.009	-.010	-.009	-.001	-.011	-.008	.396
.408							-.010			.408
.426	.178	.182	.184	.182	.178	.182	.179	.180	.179	.426
.451	.158	.162	.160	.160	.160	.157	.160		.157	.451
.476	.140	.142	.139	.141	.145	.140	.141	.143	.140	.476
.501	.118	.126	.130	.124	.120	.118	.120	.122	.127	.501
.530	-.070	-.064	-.068	-.072	-.069	-.071	-.071	-.067	-.063	.530
.548							-.055			.548
.566							-.042			.566
.584	-.040	-.040	-.039	-.041	-.043	-.046	-.039	-.036	-.041	.584
.602							-.033			.602
.620							-.023			.620
.638	-.026	-.026		-.021	-.013				-.025	.638
.655							-.020			.655
.673							-.019			.673
.691	-.016	-.018	-.019	-.022	-.029	-.026	-.015	-.020	-.012	.691
.709							-.016			.709
.727							-.014			.727
.745	-.009	-.016		-.015	-.013		-.010		-.006	.745
.763							-.005			.763
.781							-.012			.781
.799							-.007			.799
.817	.004	-.004	-.005	-.003	-.008	-.004	-.001	-.000	.009	.817
.834							-.005			.834
.852							.002			.852
.870							.003			.870
.888							.008			.888
.906							.005			.906
.921	-.082									.921
.924	.004	.004		-.007	.006		.009		-.005	.924
.947							.011			.947
.964							.012			.964
.981	.055	.029	.014		.011	.007	.006	.007	.011	.981
1.000	-.085									1.000

Nose rake			Base rake		
Orifice station, y, in.	Cp top	Cp side	Orifice station, y, in.	Cp top	Cp side
.010	.791	.631	.031	.506	.534
.030	1.216	1.282	.094	.739	.746
.050	1.550	1.649	.156	.911	.910
.070	1.706	1.723	.219	1.077	1.080
.090	1.744	1.727	.281	1.217	1.228
.110	1.740	1.684	.344	1.352	1.352
.130	1.718	1.623	.406	1.453	1.458
.150	1.685	1.595	.469	1.524	1.528
.170	1.649	1.570	.750	1.563	
.190	1.534	1.475	1.000	1.561	
			1.250	1.562	
			1.500	1.561	

[redacted]

TABLE 1. - PRESSURE COEFFICIENTS FOR AN INTERCONTINENTAL BALLISTIC MISSILE FOR NOSE I WITH NATURAL TRANSITION AT M = 1.57 - Continued

(e) $\alpha = 3.0^{\circ}$

Model station, $\frac{x}{l}$	Cp for meridian angle, θ, deg – 0	90	105	120	150	165	180	225	270	Model station, $\frac{x}{l}$
-.055							1.550			-.055
-.037							.363			-.037
-.018							.328			-.018
.002							.279			.002
.021							.205			.021
.041							.164			.041
.060		.076	.085	.090	.121	.126	.127			.060
.075	.081	.104	.115	.125	.143	.149	.156	.143		.075
.085	.106	.143	.155	.186	.212	.212	.201	.197	.171	.085
.096	.231									.096
.126		.165	.176	.183	.201	.204	.209	.186	.151	.126
.143							-.130			.143
.154	-.142	-.123	-.121	-.112	-.101	-.097	-.094	-.115		.154
.171							-.082			.171
.189							-.066			.189
.206	-.082	-.078	-.068	-.074	-.059	-.054	-.054	-.066		.206
.223							-.041			.223
.241							-.038			.241
.258	-.048	-.051	-.051	-.047	-.032	-.026	-.032	-.040	-.048	.258
.275							-.030			.275
.293							-.026			.293
.310	-.021	-.033	-.033	-.026	-.029	-.024	-.022	-.027	-.035	.310
.327							-.020			.327
.344							-.017			.344
.362	-.010	-.027	-.025	-.020	-.017	-.009	-.007	-.019	-.025	.362
.379							-.006			.379
.396	-.008	-.018	-.019	-.016	-.010	-.005	.001	-.017	-.017	.396
.408							-.008			.408
.426	.168	.175	.180	.181	.184	.193	.189	.181	.169	.426
.451	.147	.155	.156	.160	.169	.168	.173		.146	.451
.476	.124	.134	.137	.144	.159	.162	.166	.148	.132	.476
.501	.102	.119	.130	.132	.138	.138	.143	.135	.118	.501
.530	-.076	-.071	-.071	-.070	-.058	-.058	-.055	-.061	-.072	.530
.548							-.041			.548
.566							-.026			.566
.584	-.050	-.046	-.042	-.040	-.034	-.034	-.025	-.031	-.049	.584
.602							-.021			.602
.620							-.014			.620
.638	-.029	-.033		-.021	-.006				-.032	.638
.655							-.011			.655
.673							-.011			.673
.691	-.016	-.026	-.027	-.025	-.027	-.021	-.008	-.023	-.021	.691
.709							-.010			.709
.727							-.010			.727
.745	-.007	-.022		-.019	-.012		-.004		-.014	.745
.763							-.005			.763
.781							-.009			.781
.799							-.008			.799
.817	.004	-.013	-.011	-.012	-.008	-.003	.002	-.005	.001	.817
.834							-.002			.834
.852							.006			.852
.870							.006			.870
.888							.011			.888
.906							.010			.906
.921	-.094									.921
.924	.011	.001		-.011	.001		.012		-.008	.924
.947							.012			.947
.964							.016			.964
.981	.064	.019	.004		.010	.009	.010	.009	.006	.981
1.000	-.102									1.000

Nose rake			Base rake		
Orifice station, y, in.	Cp top	Cp side	Orifice station, y, in.	Cp top	Cp side
.010	.662	1.006	.031	.473	.546
.030	1.007	1.454	.094	.662	.803
.050	1.355	1.626	.156	.772	1.019
.070	1.622	1.665	.219	.860	1.242
.090	1.721	1.664	.281	.931	1.414
.110	1.733	1.653	.344	1.008	1.509
.130	1.712	1.638	.406	1.079	1.554
.150	1.678	1.625	.469	1.150	1.567
.170	1.636	1.601	.750	1.413	
.190	1.518	1.502	1.000	1.551	
			1.250	1.560	
			1.500	1.561	

[redacted]

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TABLE 1. - PRESSURE COEFFICIENTS FOR AN INTERCONTINENTAL BALLISTIC MISSILE FOR NOSE I WITH NATURAL TRANSITION AT M = 1.57 - Continued

(f) $\alpha = 6.3^{\circ}$

Model station, $\frac{x}{l}$	Cp for meridian angle, θ, deg –									Model station, $\frac{x}{l}$
	0	90	105	120	150	165	180	225	270	
-.055							1.559			-.055
-.037							.438			-.037
-.018							.400			-.018
.002		.203					.346	.290		.002
.021							.271			.021
.041							.228			.041
.060		.078	.089	.112	.165	.178	.180			.060
.075	.052	.095	.122	.148	.185	.200	.210	.164		.075
.085	.079	.144	.161	.206	.256	.264	.256	.215	.113	.085
.096	.198									.096
.126		.141	.164	.190	.241	.251	.264	.203	.130	.126
.143							-.096			.143
.154	-.161	-.136	-.124	-.106	-.075	-.065	-.059	-.103		.154
.171							-.052			.171
.189							-.038			.189
.206	-.091	-.096	-.081	-.076	-.040	-.030	-.028	-.061		.206
.223							-.016			.223
.241							-.017			.241
.258	-.041	-.087	-.075	-.057	-.023	-.010	-.014	-.043	-.083	.258
.275							-.014			.275
.293							-.011			.293
.310	-.016	-.068	-.067	-.050	-.020	-.009	-.004	-.037	-.068	.310
.327							-.005			.327
.344							-.007			.344
.362	-.005	-.059	-.052	-.042	-.025	-.013	-.009	-.038	-.052	.362
.379							-.008			.379
.396	-.004	-.052	-.055	-.045	-.016	-.007	.003	-.036	-.048	.396
.408							-.001			.408
.426	.175	.145	.151	.161	.190	.209	.208	.172	.146	.426
.451	.144	.131	.137	.147	.173	.179	.188		.123	.451
.476	.117	.107	.115	.133	.166	.174	.178	.148	.105	.476
.501	.093	.093	.111	.123	.160	.169	.176	.140	.096	.501
.530	-.097	-.091	-.082	-.069	-.043	-.037	-.034	-.050	-.092	.530
.548							-.021			.548
.566							-.009			.566
.584	-.051	-.071	-.058	-.046	-.021	-.014	-.005	-.031	-.073	.584
.602							-.001			.602
.620							-.000			.620
.638	-.029	-.055		-.035	-.006				-.058	.638
.655							.017			.655
.673							.001			.673
.691	-.016	-.058	-.044	-.037	-.024	-.010	.004	-.029	-.052	.691
.709							-.000			.709
.727							.000			.727
.745	-.003	-.053		-.038	-.011		.002		-.039	.745
.763							.005			.763
.781							-.003			.781
.799							.008			.799
.817	.008	-.038	-.039	-.029	-.007	.004	.011	-.010	-.024	.817
.834							.003			.834
.852							.015			.852
.870							.013			.870
.888							.017			.888
.906							.018			.906
.921	-.160									.921
.924	.003	-.023		-.031	.006		.019		-.035	.924
.947							.024			.947
.964							.025			.964
.981	.047	-.009	-.020		.011	.015	.017	.001	-.016	.981
1.000	-.172									1.000

Nose rake			Base rake		
Orifice station, y, in.	C_p, top	C_p side	Orifice station, y, in.	C_p top	C_p side
.010	.549	.961	.031	.713	.545
.030	.810	1.542	.094	1.248	.951
.050	1.079	1.709	.156	1.464	1.300
.070	1.373	1.702	.219	1.481	1.550
.090	1.614	1.662	.281	1.492	1.579
.110	1.712	1.619	.344	1.511	1.545
.130	1.705	1.598	.406	1.524	1.549
.150	1.677	1.587	.469	1.539	1.550
.170	1.635	1.563	.750	1.552	
.190	1.509	1.464	1.000	1.574	
			1.250	1.585	
			1.500	1.581	

[redacted]

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TABLE 1. - PRESSURE COEFFICIENTS FOR AN INTERCONTINENTAL BALLISTIC MISSILE FOR NOSE I WITH NATURAL TRANSITION AT $M = 1.57$ - Concluded

(g) $\alpha = 10.1^{\circ}$

Model station, $\frac{x}{l}$	Cp for meridian angle, θ, deg – 0	90	105	120	150	165	180	225	270	Model station, $\frac{x}{l}$
-.055							1.557			-.055
-.037							.537			-.037
-.018							.496			-.018
.002		.173					.434	.334		.002
.021							.347			.021
.041							.301			.041
.060		.043	.084	.125	.220	.246	.252			.060
.075	.023	.058	.105	.157	.241	.268	.283	.197		.075
.085	.051	.101	.140	.212	.314	.336	.333	.242	.013	.085
.096	.162									.096
.126		.099	.141	.194	.295	.318	.336	.230	.086	.126
.143							-.050			.143
.154	-.178	-.164	-.139	-.103	-.042	-.020	-.007	-.088		.154
.171							-.003			.171
.189							.005			.189
.206	-.088	-.145	-.113	-.084	-.010	.008	.014	-.052		.206
.223							.025			.223
.241							.021			.241
.258	-.036	-.141	-.120	-.080	-.005	.021	.020	-.045	-.145	.258
.275							.016			.275
.293							.018			.293
.310	-.011	-.146	-.123	-.083	-.009	.016	.026	-.049	-.142	.310
.327							.023			.327
.344							.018			.344
.362	-.001	-.131	-.125	-.090	-.020	.005	.015	-.058	-.119	.362
.379							.014			.379
.396	-.000	-.114	-.123	-.096	-.011	.013	.028	-.061	-.103	.396
.408							.020			.408
.426	.258	.083	.078	.098	.187	.229	.236	.139	.092	.426
.451	.156	.073	.077	.096	.172	.198	.215		.073	.451
.476	.113	.050	.070	.099	.173	.198	.209	.133	.059	.476
.501	.088	.041	.069	.100	.177	.201	.214	.139	.050	.501
.530	-.110	-.127	-.112	-.090	-.031	-.015	-.007	-.055	-.123	.530
.548							.007			.548
.566							.024			.566
.584	-.055	-.115	-.093	-.066	-.004	.012	.025	-.032	-.115	.584
.602							.029			.602
.620							.031			.620
.638	-.038	-.104		-.057	.014				-.101	.638
.655							.034			.655
.673							.031			.673
.691	-.019	-.115	-.096	-.069	-.012	.013	.032	-.038	-.098	.691
.709							.028			.709
.727							.027			.727
.745	-.012	-.114		-.069	-.000		.033		-.086	.745
.763							.028			.763
.781							.017			.781
.799							.020			.799
.817	-.004	-.098	-.098	-.076	-.002	.022	.035	-.030	-.069	.817
.834							.027			.834
.852							.036			.852
.870							.037			.870
.888							.041			.888
.906							.038			.906
.921	-.215									.921
.924	-.000	-.069		-.067	.000		.041		-.065	.924
.947							.039			.947
.964							.045			.964
.981	.054	-.055	-.068		.011	.029	.037	-.013	-.050	.981
1.000	-.222									1.000

Nose rake			Base rake		
Orifice station, y, in.	C_p top	C_p side	Orifice station, y, in.	C_p top	C_p side
.010	.482	.572	.031	.912	.449
.030	.700	1.335	.094	1.660	1.070
.050	.921	1.687	.156	1.592	1.527
.070	1.158	1.710	.219	1.541	1.627
.090	1.390	1.694	.281	1.540	1.500
.110	1.574	1.599	.344	1.513	1.485
.130	1.661	1.548	.406	1.493	1.504
.150	1.650	1.541	.469	1.478	1.506
.170	1.615	1.521	.750	1.418	
.190	1.491	1.423	1.000	1.433	
			1.250	1.484	
			1.500	1.530	

[redacted]

TABLE 2. - PRESSURE COEFFICIENTS FOR AN INTERCONTINENTAL BALLISTIC MISSILE FOR NOSE I WITH FIXED TRANSITION AT M = 1.57

(a) $\alpha = -10.1^{\circ}$

Model station, $\frac{x}{l}$	Cp for meridian angle, θ, deg –									Model station, $\frac{x}{l}$
	0	90	105	120	150	165	180	225	270	
-.055							1.564			-.055
-.037							.155			-.037
-.018							.125			-.018
.002		.192					.077	.095		.002
.021							.041			.021
.041							.020			.041
.060		.037	-.001	-.025	-.017	-.011	-.010			.060
.075	.291	.053	.016	.005	.004	.011	.019	.025		.075
.085	.316	.097	.056	.056	.060	.065	.061	-.003	.015	.085
.096	.494									.096
.126		.103	.063	.046	.058	.060	.067	.056	.087	.126
.143							-.205			.143
.154	-.005	-.172	-.193	-.196	-.186	-.175	-.167	-.208		.154
.171							-.140			.171
.189							-.112			.189
.206	.022	-.152	-.163	-.166	-.113	-.097	-.088	-.128		.206
.223							-.064			.223
.241							-.048			.241
.258	.024	-.148	-.157	-.130	-.065	-.046	-.036	-.079	-.150	.258
.275							-.026			.275
.293							-.016			.293
.310	.023	-.150	-.139	-.084	-.047	-.028	-.011	-.053	-.147	.310
.327							-.008			.327
.344							-.005			.344
.362	.020	-.137	-.102	-.062	-.052	-.029	-.001	-.046	-.126	.362
.379							-.002			.379
.396	.016	-.118	-.093	-.048	-.048	-.028	.008	-.040	-.107	.396
.408							.000			.408
.426	.235	.072	.095	.084	.064	.146	.249	.091	.094	.426
.451	.220	.066	.060	.072	.062	.099	.158		.070	.451
.476	.211	.048	.039	.061	.046	.086	.122	.078	.056	.476
.501	.200	.038	.033	.047	.024	.059	.087	.051	.045	.501
.530	-.001	-.132	-.138	-.113	-.093	-.134	-.113	-.081	-.130	.530
.548							-.122			.548
.566							-.092			.566
.584	.026	-.120	-.104	-.086	-.094	-.089	-.056	-.076	-.118	.584
.602							-.052			.602
.620							-.045			.620
.638	.034	-.103		-.083	-.053				-.091	.638
.655							-.030			.655
.673							-.024			.673
.691	.032	-.125	-.111	-.072	-.046	-.050	-.023	-.034	-.096	.691
.709							-.024			.709
.727							-.020			.727
.745	.028	-.120		-.054	-.037		-.018		-.092	.745
.763							-.017			.763
.781							-.028			.781
.799							-.020			.799
.817	.046	-.098	-.066	-.039	-.034	-.030	-.007	-.026	-.072	.817
.834							-.014			.834
.852							-.010			.852
.870							-.003			.870
.888							-.004			.888
.906							-.002			.906
.921	-.222									.921
.924	.052	-.073		-.032	-.031		.001		-.076	.924
.947							-.003			.947
.964							.002			.964
.981	.070	-.059	-.022		-.024	-.022	.017	-.011	-.045	.981
1.000	-.228									1.000

Nose rake			Base rake		
Orifice station, y, in.	Cp top	Cp side	Orifice station, y, in.	Cp top	Cp side
.010	1.209	.552	.031	.871*	.430
.030	1.567	1.242	.094	1.591	1.070
.050	1.693	1.643	.156	1.650	1.535
.070	1.730	1.706	.219	1.581	1.633
.090	1.747	1.696	.281	1.593	1.512
.110	1.755	1.618	.344	1.578	1.483
.130	1.745	1.554	.406	1.584	1.506
.150	1.731	1.546	.469	1.586	1.494
.170	1.707	1.529	.750	1.574	
.190	1.606	1.436	1.000	1.577	
			1.250	1.577	
			1.500	1.583	

[redacted]

TABLE 2. - PRESSURE COEFFICIENTS FOR AN INTERCONTINENTAL BALLISTIC MISSILE FOR NOSE I WITH FIXED TRANSITION AT M = 1.57 - Continued

(b) $\alpha = -6.3^{\circ}$

Model station, $\frac{x}{l}$	Cp for meridian angle, θ, deg –									Model station, $\frac{x}{l}$
	0	90	105	120	150	165	180	225	270	
-.055							1.553			-.055
-.037							.201			-.037
-.018							.170			-.018
.002		.208					.117	.136		.002
.021							.068			.021
.041							.043			.041
.060		.071	.047	.025	.020	.019	.018			.060
.075	.216	.089	.068	.055	.043	.043	.050	.071		.075
.085	.243	.138	.112	.110	.102	.101	.093	.070	.118	.085
.096	.397									.096
.126		.141	.121	.106	.098	.092	.092	.105	.130	.126
.143							-.192			.143
.154	-.059	-.137	-.148	-.159	-.167	-.164	-.158	-.165		.154
.171							-.139			.171
.189							-.111			.189
.206	-.021	-.107	-.113	-.127	-.100	-.091	-.090	-.108		.206
.223							-.064			.223
.241							-.048			.241
.258	-.012	-.089	-.090	-.079	-.049	-.037	-.037	-.055	-.088	.258
.275							-.031			.275
.293							-.024			.293
.310	-.012	-.069	-.064	-.050	-.030	-.019	-.016	-.033	-.070	.310
.327							-.012			.327
.344							-.009			.344
.362	-.003	-.057	-.051	-.036	-.019	-.008	-.001	-.022	-.056	.362
.379							-.001			.379
.396	-.009	-.053	-.046	-.032	-.014	-.008	.001	-.015	-.049	.396
.408							.021			.408
.426	.204	.143	.152	.145	.132	.148	.166	.138	.147	.426
.451	.191	.129	.119	.115	.118	.124	.140		.124	.451
.476	.180	.104	.094	.095	.098	.103	.115	.103	.107	.476
.501	.167	.093	.084	.078	.066	.077	.094	.079	.091	.501
.530	-.029	-.092	-.101	-.108	-.081	-.085	-.097	-.081	-.095	.530
.548							-.072			.548
.566							-.059			.566
.584	.001	-.074	-.074	-.064	-.065	-.064	-.053	-.061	-.075	.584
.602							-.044			.602
.620							-.037			.620
.638	.003	-.053		-.051	-.041				-.051	.638
.655							-.021			.655
.673							-.020			.673
.691	.003	-.064	-.060	-.050	-.031	-.029	-.008	-.023	-.050	.691
.709							-.012			.709
.727							-.003			.727
.745	.001	-.057		-.035	-.021		-.008		-.045	.745
.763							-.006			.763
.781							-.014			.781
.799							-.004			.799
.817	.021	-.040	-.033	-.023	-.013	-.008	.004	-.009	-.025	.817
.834							-.001			.834
.852							.005			.852
.870							.007			.870
.888							.010			.888
.906							.012			.906
.921	-.159									.921
.924	.030	-.030		-.015	-.003		.015		-.045	.924
.947							.012			.947
.964							.017			.964
.981	.054	-.012	-.010		-.002	.001	.007	-.004	-.012	.981
1.000	-.165									1.000

Nose rake			Base rake		
Orifice station, y, in.	Cp top	Cp side	Orifice station, y, in.	Cp top	Cp side
.010	1.059	.595	.031	.761	.532
.030	1.483	1.268	.094	1.329	.965
.050	1.672	1.652	.156	1.612	1.318
.070	1.732	1.721	.219	1.581	1.557
.090	1.753	1.716	.281	1.563	1.583
.110	1.753	1.665	.344	1.565	1.542
.130	1.739	1.597	.406	1.565	1.542
.150	1.715	1.580	.469	1.568	1.542
.170	1.690	1.561	.750	1.558	
.190	1.581	1.459	1.000	1.566	
			1.250	1.559	
			1.500	1.550	

[redacted]

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TABLE 2. - PRESSURE COEFFICIENTS FOR AN INTERCONTINENTAL BALLISTIC MISSILE FOR NOSE I WITH FIXED TRANSITION AT M = 1.57 - Continued

(c) $\alpha = -3.0^{\circ}$

Model station, $\frac{x}{l}$	Cp for meridian angle, θ, deg –									Model station, $\frac{x}{l}$
	0	90	105	120	150	165	180	225	270	
-.055							1.554			-.055
-.037							.251			-.037
-.018							.214			-.018
.002		.230					.154	.186		.002
.021							.108			.021
.041							.078			.041
.060		.088	.075	.057	.053	.050	.048			.060
.075	.164	.107	.100	.090	.076	.074	.079	.097		.075
.085	.189	.161	.144	.148	.139	.133	.123	.127	.168	.085
.096	.328									.096
.126		.160	.149	.137	.131	.125	.123	.137	.151	.126
.143							-.176			.143
.154	-.094	-.120	-.130	-.138	-.145	-.146	-.140	-.144		.154
.171							-.123			.171
.189							-.102			.189
.206	-.049	-.081	-.083	-.095	-.086	-.086	-.086	-.087		.206
.223							-.068			.223
.241							-.055			.241
.258	-.031	-.053	-.058	-.056	-.048	-.042	-.043	-.048	-.052	.258
.275							-.032			.275
.293							-.025			.293
.310	-.024	-.036	-.035	-.027	-.024	-.018	-.019	-.023	-.038	.310
.327							-.016			.327
.344							-.014			.344
.362	-.012	-.022	-.022	-.019	-.017	-.012	-.010	-.014	-.024	.362
.379							-.009			.379
.396	-.015	-.021	-.021	-.019	-.008	-.001	.006	-.013	-.019	.396
.408							.021			.408
.426	.190	.174	.175	.173	.162	.164	.163	.187	.170	.426
.451	.173	.155	.150	.143	.138	.137	.141		.149	.451
.476	.158	.131	.122	.121	.119	.118	.121	.126	.133	.476
.501	.141	.116	.112	.104	.100	.099	.102	.110	.114	.501
.530	-.051	-.073	-.078	-.083	-.079	-.081	-.079	-.074	-.077	.530
.548							-.061			.548
.566							-.046			.566
.584	-.024	-.048	-.051	-.050	-.048	-.054	-.050	-.037	-.051	.584
.602							-.042			.602
.620							-.034			.620
.638	-.015	-.029		-.032	-.028				-.029	.638
.655							-.022			.655
.673							-.021			.673
.691	-.010	-.035	-.034	-.032	-.030	-.025	-.012	-.016	-.025	.691
.709							-.012			.709
.727							-.008			.727
.745	-.001	-.027		-.020	-.012		-.009		-.017	.745
.763							-.007			.763
.781							-.012			.781
.799							-.003			.799
.817	.009	-.015	-.014	-.010	-.005	-.002	.001	-.002	-.000	.817
.834							-.002			.834
.852							.003			.852
.870							.006			.870
.888							.008			.888
.906							.010			.906
.921	-.101									.921
.924	.018	.000		-.008	.004		.012		-.011	.924
.947							.009			.947
.964							.013			.964
.981	.049	.010	.004		.008	.009	.008	.003	.006	.981
1.000	-.105									1.000

Nose rake			Base rake		
Orifice station, y, in.	Cp top	Cp side	Orifice station, y, in.	Cp top	Cp side
.010	.915	.606	.031	.654	.545
.030	1.343	1.171	.094	1.046	.824
.050	1.622	1.587	.156	1.337	1.051
.070	1.722	1.716	.219	1.522	1.270
.090	1.746	1.728	.281	1.552	1.435
.110	1.746	1.692	.344	1.571	1.517
.130	1.727	1.624	.406	1.563	1.551
.150	1.703	1.590	.469	1.566	1.561
.170	1.668	1.564	.750	1.556	
.190	1.555	1.463	1.000	1.561	
			1.250	1.558	
			1.500	1.558	

[redacted]

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TABLE 2. - PRESSURE COEFFICIENTS FOR AN INTERCONTINENTAL BALLISTIC MISSILE FOR NOSE I WITH FIXED TRANSITION AT M = 1.57 - Continued

(d) $\alpha = 0^{\circ}$

Model station, $\frac{x}{l}$	Cp for meridian angle, θ, deg –									Model station, $\frac{x}{l}$
	0	90	105	120	150	165	180	225	270	
-.055							1.555			-.055
-.037							.303			-.037
-.018							.265			-.018
.002		.227					.205	.219		.002
.021							.150			.021
.041							.117			.041
.060		.093	.090	.079	.086	.085	.084			.060
.075	.118	.113	.117	.114	.108	.109	.114	.116		.075
.085	.143	.167	.161	.173	.175	.170	.158	.174	.183	.085
.096	.272									.096
.126		.169	.169	.164	.166	.162	.162	.164	.160	.126
.143							-.156			.143
.154	-.122	-.116	-.120	-.122	-.124	-.125	-.119	-.129		.154
.171							-.105			.171
.189							-.088			.189
.206	-.071	-.072	-.069	-.080	-.072	-.072	-.073	-.074		.206
.223							-.056			.223
.241							-.049			.241
.258	-.043	-.043	-.044	-.044	-.041	-.037	-.042	-.041	-.039	.258
.275							-.039			.275
.293							-.038			.293
.310	-.029	-.022	-.025	-.024	-.032	-.026	-.026	-.026	-.025	.310
.327							-.022			.327
.344							-.013			.344
.362	-.012	-.018	-.016	-.011	-.013	-.008	-.008	-.010	-.016	.362
.379							-.011			.379
.396	-.014	-.009	-.009	-.010	-.011	-.009	-.002	-.012	-.008	.396
.408							-.011			.408
.426	.178	.182	.184	.181	.177	.182	.178	.179	.179	.426
.451	.158	.161	.160	.160	.159	.157	.160		.156	.451
.476	.140	.141	.139	.141	.144	.139	.140	.144	.140	.476
.501	.118	.126	.130	.123	.120	.117	.118	.121	.127	.501
.530	-.070	-.064	-.068	-.072	-.069	-.072	-.072	-.068	-.064	.530
.548							-.056			.548
.566							-.043			.566
.584	-.040	-.040	-.039	-.041	-.044	-.046	-.040	-.036	-.041	.584
.602							-.034			.602
.620							-.023			.620
.638	-.025	-.026		-.021	-.014				-.025	.638
.655							-.020			.655
.673							-.019			.673
.691	-.016	-.018	-.019	-.022	-.029	-.026	-.015	-.020	-.012	.691
.709							-.016			.709
.727							-.015			.727
.745	-.009	-.016		-.015	-.013		-.010		-.006	.745
.763							-.006			.763
.781							-.011			.781
.799							-.007			.799
.817	.004	-.005	-.005	-.004	-.009	-.005	-.001	-.001	.009	.817
.834							-.005			.834
.852							.002			.852
.870							.002			.870
.888							.008			.888
.906							.006			.906
.921	-.081									.921
.924	.005	.004		-.007	.005		.008		-.005	.924
.947							.011			.947
.964							.012			.964
.981	.054	.028	.014		.011	.007	.006	.007	.011	.981
1.000	-.085									1.000

Nose rake			Base rake		
Orifice station, y, in.	C_p top	C_p side	Orifice station, y, in.	C_p top	C_p side
.010	.776	.603	.031	.509	.535
.030	1.167	1.180	.094	.738	.746
.050	1.510	1.592	.156	.910	.911
.070	1.688	1.713	.219	1.075	1.079
.090	1.737	1.728	.281	1.214	1.230
.110	1.739	1.696	.344	1.346	1.355
.130	1.720	1.631	.406	1.449	1.457
.150	1.687	1.594	.469	1.521	1.527
.170	1.649	1.567	.750	1.564	
.190	1.530	1.471	1.000	1.563	
			1.250	1.563	
			1.500	1.558	

[redacted]

TABLE 2. - PRESSURE COEFFICIENTS FOR AN INTERCONTINENTAL BALLISTIC MISSILE FOR NOSE I WITH FIXED TRANSITION AT M = 1.57 - Continued

(e) $\alpha = 3.0^{\circ}$

Model station, $\frac{x}{l}$	Cp for meridian angle, θ, deg –									Model station, $\frac{x}{l}$
	0	90	105	120	150	165	180	225	270	
-.055							1.554			-.055
-.037							.362			-.037
-.018							.329			-.018
.002							.259			.002
.021							.206			.021
.041							.165			.041
.060		.090	.096	.096	.122	.127	.127			.060
.075	.082	.109	.123	.132	.143	.148	.156	.138		.075
.085	.107	.159	.167	.192	.212	.211	.202	.202	.166	.085
.096	.232									.096
.126		.163	.172	.180	.201	.204	.209	.185	.150	.126
.143							-.130			.143
.154	-.142	-.122	-.119	-.112	-.102	-.098	-.094	-.115		.154
.171							-.082			.171
.189							-.066			.189
.206	-.083	-.078	-.068	-.074	-.059	-.055	-.054	-.065		.206
.223							-.041			.223
.241							-.038			.241
.258	-.048	-.052	-.052	-.047	-.033	-.027	-.031	-.040	-.048	.258
.275							-.031			.275
.293							-.028			.293
.310	-.022	-.034	-.033	-.027	-.029	-.025	-.024	-.026	-.035	.310
.327							-.020			.327
.344							-.018			.344
.362	-.011	-.027	-.025	-.020	-.017	-.009	-.007	-.019	-.026	.362
.379							-.007			.379
.396	-.009	-.019	-.019	-.016	-.009	-.006	-.000	-.016	-.017	.396
.408							-.009			.408
.426	.168	.175	.180	.181	.184	.192	.188	.182	.169	.426
.451	.146	.154	.156	.161	.169	.167	.172		.146	.451
.476	.123	.134	.136	.144	.160	.163	.166	.149	.132	.476
.501	.101	.119	.129	.132	.138	.138	.142	.136	.118	.501
.530	-.076	-.071	-.071	-.070	-.058	-.058	-.057	-.061	-.071	.530
.548							-.042			.548
.566							-.028			.566
.584	-.050	-.047	-.042	-.040	-.034	-.034	-.026	-.031	-.048	.584
.602							-.021			.602
.620							-.014			.620
.638	-.029	-.033		-.021	-.007				-.032	.638
.655							-.011			.655
.673							-.012			.673
.691	-.017	-.027	-.027	-.025	-.027	-.021	-.009	-.023	-.021	.691
.709							-.011			.709
.727							-.010			.727
.745	-.007	-.023		-.019	-.011		-.004		-.014	.745
.763							-.006			.763
.781							-.010			.781
.799							-.009			.799
.817	.004	-.014	-.011	-.013	-.008	-.003	.002	-.005	.001	.817
.834							-.002			.834
.852							.005			.852
.870							.005			.870
.888							.011			.888
.906							.009			.906
.921	-.094									.921
.924	.010	.000		-.011	.000		.012		-.008	.924
.947							.012			.947
.964							.016			.964
.981	.064	.018	.003		.010	.009	.009	.009	.007	.981
1.000	-.101									1.000

Nose rake			Base rake		
Orifice station, y, in.	C_p top	C_p side	Orifice station, y, in.	C_p top	C_p side
.010	.657	.600	.031	.469	.546
.030	.969	1.243	.094	.657	.807
.050	1.292	1.643	.156	.764	1.020
.070	1.569	1.721	.219	.853	1.240
.090	1.709	1.724	.281	.925	1.413
.110	1.736	1.683	.344	.997	1.510
.130	1.714	1.611	.406	1.070	1.556
.150	1.683	1.587	.469	1.140	1.567
.170	1.640	1.561	.750	1.404	
.190	1.514	1.466	1.000	1.548	
			1.250	1.563	
			1.500	1.564	

[redacted]

TABLE 2. - PRESSURE COEFFICIENTS FOR AN INTERCONTINENTAL BALLISTIC MISSILE FOR NOSE I WITH FIXED TRANSITION AT M = 1.57 - Continued

(f) $\alpha = 6.3^{\circ}$

Model station, $\frac{x}{l}$	Cp for meridian angle, θ, deg –									Model station, $\frac{x}{l}$
	0	90	105	120	150	165	180	225	270	
-.055							1.556			-.055
-.037							.441			-.037
-.018							.401			-.018
.002		.222					.323	.298		.002
.021							.268			.021
.041							.225			.041
.060		.075	.096	.112	.165	.177	.179			.060
.075	.052	.092	.120	.145	.185	.199	.209	.163		.075
.085	.078	.139	.159	.204	.256	.265	.258	.216	.114	.085
.096	.198									.096
.126		.142	.165	.190	.242	.252	.264	.204	.129	.126
.143							-.096			.143
.154	-.161	-.136	-.125	-.107	-.076	-.066	-.058	-.101		.154
.171							-.051			.171
.189							-.037			.189
.206	-.090	-.096	-.082	-.076	-.040	-.031	-.027	-.061		.206
.223							-.016			.223
.241							-.016			.241
.258	-.043	-.084	-.076	-.058	-.024	-.009	-.013	-.042	-.080	.258
.275							-.014			.275
.293							-.012			.293
.310	-.016	-.072	-.066	-.047	-.022	-.011	-.006	-.037	-.071	.310
.327							-.008			.327
.344							-.010			.344
.362	-.006	-.059	-.055	-.046	-.021	-.009	-.005	-.036	-.053	.362
.379							-.001			.379
.396	-.003	-.051	-.052	-.041	-.011	-.001	.008	-.032	-.046	.396
.408							-.002			.408
.426	.172	.147	.151	.158	.185	.203	.202	.171	.148	.426
.451	.142	.129	.133	.143	.172	.179	.188		.123	.451
.476	.116	.109	.117	.134	.168	.176	.181	.148	.108	.476
.501	.092	.094	.112	.128	.157	.163	.170	.147	.095	.501
.530	-.092	-.091	-.084	-.075	-.045	-.039	-.036	-.056	-.089	.530
.548							-.022			.548
.566							-.006			.566
.584	-.038	-.071	-.059	-.048	-.021	-.015	-.005	-.029	-.073	.584
.602							-.002			.602
.620							.001			.620
.638	-.029	-.059		-.033	.002				-.057	.638
.655							.004			.655
.673							.003			.673
.691	-.016	-.055	-.051	-.040	-.023	-.010	.004	-.029	-.048	.691
.709							.000			.709
.727							.000			.727
.745	.001	-.052		-.037	-.008		.007		-.040	.745
.763							.003			.763
.781							-.005			.781
.799							-.001			.799
.817	.007	-.040	-.040	-.034	-.008	.003	.011	-.015	-.022	.817
.834							.005			.834
.852							.014			.852
.870							.014			.870
.888							.023			.888
.906							.014			.906
.921	-.149									.921
.924	.011	-.023		-.031	.003		.023		-.030	.924
.947							.020			.947
.964							.026			.964
.981	.046	-.010	-.019		.011	.016	.018	-.000	-.016	.981
1.000	-.163									1.000

Nose rake			Base rake		
Orifice station, y, in.	C_p top	C_p side	Orifice station, y, in.	C_p top	C_p side
.010	.548	.585	.031	.706	.544
.030	.789	1.260	.094	1.218	.952
.050	1.039	1.661	.156	1.413	1.295
.070	1.306	1.733	.219	1.420	1.546
.090	1.555	1.724	.281	1.429	1.576
.110	1.698	1.668	.344	1.457	1.545
.130	1.716	1.593	.406	1.478	1.545
.150	1.690	1.580	.469	1.495	1.545
.170	1.644	1.557	.750	1.529	
.190	1.523	1.457	1.000	1.558	
			1.250	1.567	
			1.500	1.563	

[redacted]

TABLE 2. - PRESSURE COEFFICIENTS FOR AN INTERCONTINENTAL BALLISTIC MISSILE FOR NOSE I WITH FIXED TRANSITION AT $M = 1.57$ - Concluded

(g) $\alpha = 10.1^{\circ}$

Model station, $\frac{x}{l}$	Cp for meridian angle, θ, deg –									Model station, $\frac{x}{l}$
	0	90	105	120	150	165	180	225	270	
-.055							1.557			-.055
-.037							.537			-.037
-.018							.492			-.018
.002		.191					.404	.332		.002
.021							.350			.021
.041							.303			.041
.060		.041	.083	.124	.221	.245	.251			.060
.075	.024	.058	.103	.155	.239	.267	.282	.196		.075
.085	.051	.101	.138	.210	.312	.335	.332	.241	.013	.085
.096	.162									.096
.126		.100	.142	.194	.294	.317	.335	.230	.086	.126
.143							-.050			.143
.154	-.180	-.164	-.140	-.103	-.043	-.020	-.008	-.087		.154
.171							-.002			.171
.189							.005			.189
.206	-.088	-.143	-.114	-.085	-.011	.008	.015	-.051		.206
.223							.025			.223
.241							.022			.241
.258	-.037	-.145	-.117	-.080	-.006	.021	.021	-.045	-.146	.258
.275							.019			.275
.293							.018			.293
.310	-.012	-.145	-.128	-.081	-.010	.015	.017	-.047	-.143	.310
.327							.024			.327
.344							.021			.344
.362	-.002	-.132	-.126	-.092	-.017	.010	.014	-.056	-.119	.362
.379							.019			.379
.396	-.001	-.112	-.120	-.092	-.009	.016	.020	-.058	-.101	.396
.408							.030			.408
.426	.253	.085	.077	.096	.184	.226	.018	.138	.095	.426
.451	.155	.074	.077	.095	.173	.199	.231		.074	.451
.476	.113	.053	.072	.100	.174	.200	.212	.134	.060	.476
.501	.085	.041	.073	.103	.168	.190	.202	.141	.052	.501
.530	-.110	-.129	-.115	-.090	-.030	-.015	-.007	-.054	-.125	.530
.548							.009			.548
.566							.024			.566
.584	-.055	-.115	-.093	-.068	-.006	.012	.025	-.030	-.115	.584
.602							.030			.602
.620							.041			.620
.638	-.038	-.105		-.052	.007				-.099	.638
.655							.035			.655
.673							.031			.673
.691	-.024	-.113	-.098	-.071	-.015	.011	.033	-.035	-.095	.691
.709							.029			.709
.727							.031			.727
.745	-.016	-.112		-.068	-.002		.027		-.086	.745
.763							.031			.763
.781							.011			.781
.799							.021			.799
.817	-.004	-.098	-.097	-.072	-.003	.022	.035	-.028	-.070	.817
.834							.025			.834
.852							.036			.852
.870							.040			.870
.888							.036			.888
.906							.039			.906
.921	-.208									.921
.924	-.008	-.071		-.069	.000		.043		-.066	.924
.947							.040			.947
.964							.046			.964
.981	.035	-.054	-.071		.010	.029	.037	-.013	-.052	.981
1.000	-.215									1.000

Nose rake			Base rake		
Orifice station, y, in.	Cp top	Cp side	Orifice station, y, in.	Cp top	Cp side
.010	.473	.530	.031	.882	.451
.030	.672	1.216	.094	1.643	1.068
.050	.876	1.650	.156	1.555	1.527
.070	1.089	1.711	.219	1.514	1.630
.090	1.310	1.700	.281	1.521	1.508
.110	1.502	1.622	.344	1.498	1.489
.130	1.637	1.547	.406	1.484	1.507
.150	1.657	1.539	.469	1.471	1.507
.170	1.619	1.517	.750	1.415	
.190	1.494	1.418	1.000	1.433	
			1.250	1.478	
			1.500	1.313	

[redacted]

TABLE 3. - PRESSURE COEFFICIENTS FOR AN INTERCONTINENTAL BALLISTIC MISSILE FOR NOSE I WITH FIXED TRANSITION AT M = 2.98

(a) $\alpha = -10.1^{\circ}$

Model station, $\frac{x}{l}$	Cp for meridian angle, θ, deg –									Model station, $\frac{x}{l}$
	0	90	105	120	150	165	180	225	270	
-.055							1.740			-.055
-.037							.088			-.037
-.018							.051			-.018
.002		.124					.028	.043		.002
.029							.012			.029
.041							-.000			.041
.060		.052	.020	-.001	-.011	-.010	-.008			.060
.075	.238	.054	.025	.011	-.004	-.002	.000	-.001		.075
.085	.260	.077	.042	.027	.012	.018	.014	.019	.062	.085
.096	.275									.096
.126		.077	.047	.024	.019	.021	.024	.019	.070	.126
.143							-.067			.143
.154	.055	-.050	-.066	-.075	-.076		-.072	-.078	-.052	.154
.171							-.073			.171
.189							-.068			.189
.206	.055	-.053	-.069	-.076	-.065	-.060	-.060	-.073	-.053	.206
.223							-.053			.223
.241							-.046			.241
.258	.053	-.058	-.073	-.080	-.053	-.045	-.041	-.067	-.055	.258
.275							-.035			.275
.293							-.032			.293
.310	.052	-.063	-.079	-.082	-.046	-.037	-.029	-.059	-.066	.310
.327							-.026			.327
.344							-.023			.344
.362	.047	-.069	-.085	-.070	-.045	-.034	-.020	-.051	-.071	.362
.379							-.019			.379
.396	.043	-.073	-.089	-.061	-.047	-.034	-.016	-.052	-.074	.396
.408							-.016			.408
.426	.168	-.027	-.036	-.014	-.009	.020	.074	-.010	-.029	.426
.451	.172	-.019	-.042	-.003	-.002	.022	.080	-.002	-.020	.451
.476	.174	-.018	-.041	.001	-.009	.020	.075	.002	-.018	.476
.501	.168		-.039	.004	-.015	.018	.060		-.016	.501
.530	.041	-.074	-.077	-.046	-.061		-.035	-.037	-.073	.530
.548							-.035			.548
.566							-.036			.566
.584	.045	-.077	-.060	-.047	-.072	-.041	-.037	-.048	-.074	.584
.602							-.037			.602
.620							-.034			.620
.638	.044	-.077		-.053	-.063		-.030		-.077	.638
.655							-.028			.655
.673							-.027			.673
.691	.040	-.080	-.056		-.047	-.037		-.044	-.080	.691
.709							-.027			.709
.727							-.026			.727
.745	.043	-.071		-.048	-.040		-.025		-.081	.745
.763							-.025			.763
.781							-.027			.781
.799							-.027			.799
.817	.042	-.081	-.050	-.041	-.047	-.035	-.024	-.043	-.082	.817
.834							-.026			.834
.870							-.026			.870
.888							-.027			.888
.921	-.117									.921
.924	.040	-.064		-.043			-.025			.924
.947							-.025			.947
.964							-.023			.964
.981	.057	-.052	-.041		-.045	-.040	-.023	-.039	-.047	.981
.984					-.047				-.060	.984
.998							-.024			.998
1.000	-.117									1.000

Nose rake			Base rake		
Orifice station, y, in.	Cp top	Cp side	Orifice station, y, in.	Cp top	Cp side
.010	1.164	.358	.031	.762	.102
.030	2.858	1.997	.094	1.756	.437
.050	3.545	2.639	.156	1.940	.976
.070	2.854	1.991	.219	1.966	1.170
.090	2.764	1.947	.281	1.951	1.310
.110	2.764	1.973	.344	1.935	1.330
.130	2.781	2.002	.406	1.928	1.324
.150	2.793	2.018	.469	1.944	1.296
.170	2.803	2.023	.750	1.923	
.190	2.703	1.944	1.000	1.930	
			1.250	1.930	
			1.500	1.799	

[redacted]

TABLE 3. - PRESSURE COEFFICIENTS FOR AN INTERCONTINENTAL BALLISTIC MISSILE FOR NOSE I WITH FIXED TRANSITION AT M = 2.98 - Continued

(b) α = -6.3°

Model station, $\frac{x}{l}$	Cp for meridian angle, θ, deg –									Model station, $\frac{x}{l}$
	0	90	105	120	150	165	180	225	270	
-.055							1.761			-.055
-.037							.131			-.037
-.018							.092			-.018
.002		.138					.060	.085		.002
.029							.042			.029
.041							.021			.041
.060		.063	.042	.025	.017	.010	.012			.060
.075	.167	.067	.051	.035	.021	.020	.021	.030		.075
.085	.186	.092	.071	.062	.042	.046	.040	.048	.082	.085
.096	.202									.096
.126		.095	.078	.061	.050	.046	.048	.051	.091	.126
.143							-.060			.143
.154	.015	-.043	-.054	-.060	-.065		-.065	-.063	-.040	.154
.171							-.063			.171
.189							-.058			.189
.206	.016	-.040	-.050	-.055	-.053	-.051	-.054	-.055	-.040	.206
.223							-.048			.223
.241							-.043			.241
.258	.018	-.040	-.048	-.051	-.042	-.038	-.038	-.047	-.036	.258
.275							-.033			.275
.293							-.030			.293
.310	.017	-.042	-.049	-.049	-.032	-.027	-.026	-.040	-.040	.310
.327							-.023			.327
.344							-.020			.344
.362	.015	-.044	-.049	-.043	-.025	-.020	-.018	-.031	-.042	.362
.379							-.016			.379
.396	.011	-.047	-.050	-.038	-.022	-.016	-.014	-.026	-.044	.396
.408							-.013			.408
.426	.122	.017	.019	.031	.041	.050	.061	.037	.023	.426
.451	.127	.027	.028	.039	.055	.061	.075	.047	.032	.451
.476	.124	.027	.028	.036	.050	.054	.067	.048	.033	.476
.501	.123		.027	.033	.044	.048	.059		.034	.501
.530	.008	-.047	-.046	-.038	-.022		-.024	-.026	-.042	.530
.548							-.029			.548
.566							-.027			.566
.584	.012	-.045	-.042	-.035	-.031	-.030	-.027	-.026	-.041	.584
.602							-.026			.602
.620							-.024			.620
.638	.012	-.043		-.032	-.027		-.021		-.039	.638
.655							-.019			.655
.673							-.017			.673
.691	.009	-.042	-.037		-.024	-.021		-.024	-.039	.691
.709							-.015			.709
.727							-.013			.727
.745	.011	-.034		-.026	-.021		-.011		-.039	.745
.763							-.010			.763
.781							-.012			.781
.799							-.010			.799
.817	.012	-.039	-.031	-.021	-.017	-.013	-.007	-.019	-.038	.817
.834							-.008			.834
.870							-.006			.870
.888							-.005			.888
.921	-.111									.921
.924	.011	-.035		-.019			-.004			.924
.947							-.006			.947
.964							-.004			.964
.981	.022	-.032	-.023		-.017	-.011	-.005	-.015	-.033	.981
.984					-.017				-.039	.984
.998							-.006			.998
1.000	-.112									1.000

Nose rake			Base rake		
Orifice station, y, in.	Cp top	Cp side	Orifice station, y, in.	Cp top	Cp side
.010	.953	.377	.031	.601	.296
.030	2.532	1.620	.094	1.371	.760
.050	3.377	2.601	.156	1.639	1.024
.070	2.693	2.307	.219	1.770	1.294
.090	2.580	2.143	.281	1.793	1.467
.110	2.592	2.083	.344	1.785	1.513
.130	2.609	2.077	.406	1.786	1.534
.150	2.609	2.088	.469	1.795	1.544
.170	2.605	2.090	.750	1.789	
.190	2.502	2.012	1.000	1.798	
			1.250	1.806	
			1.500	1.667	

[redacted]

TABLE 3. - PRESSURE COEFFICIENTS FOR AN INTERCONTINENTAL BALLISTIC MISSILE FOR NOSE I WITH FIXED TRANSITION AT M = 2.98 - Continued

(c) $\alpha = -3.0^{\circ}$

Model station, $\frac{x}{l}$	Cp for meridian angle, θ, deg –									Model station, $\frac{x}{l}$
	0	90	105	120	150	165	180	225	270	
-.055							1.760			-.055
-.037							.177			-.037
-.018							.135			-.018
.002		.154					.095	.119		.002
.029							.064			.029
.041							.041			.041
.060		.068	.059	.050	.044	.042	.040			.060
.075	.119	.076	.070	.058	.051	.051	.051	.057		.075
.085	.136	.098	.088	.085	.072	.070	.069	.077	.094	.085
.096	.149									.096
.126		.106	.099	.086	.078	.074	.073	.083	.100	.126
.143							-.057			.143
.154	-.012	-.041	-.044	-.049	-.055		-.055	-.051	-.032	.154
.171							-.051			.171
.189							-.047			.189
.206	-.010	-.033	-.037	-.040	-.041	-.042	-.044	-.040	-.031	.206
.223							-.040			.223
.241							-.036			.241
.258	-.007	-.028	-.031	-.032	-.033	-.031	-.034	-.032	-.023	.258
.275							-.030			.275
.293							-.028			.293
.310	-.004	-.025	-.028	-.026	-.025	-.024	-.025	-.025	-.022	.310
.327							-.022			.327
.344							-.020			.344
.362	-.003	-.022	-.024	-.022	-.019	-.018	-.017	-.019	-.019	.362
.379							-.016			.379
.396	-.006	-.021	-.022	-.020	-.015	-.014	-.014	-.017	-.018	.396
.408							-.013			.408
.426	.094	.055	.058	.057	.060	.061	.063	.058	.061	.426
.451	.097	.067	.066	.067	.073	.074	.077	.072	.071	.451
.476	.094	.064	.062	.062	.067	.068	.070	.069	.068	.476
.501	.091		.059	.058	.061	.061	.063		.066	.501
.530	-.010	-.025	-.025	-.024	-.020		-.018	-.019	-.021	.530
.548							-.022			.548
.566							-.021			.566
.584	-.007	-.025	-.025	-.024	-.025	-.024	-.020	-.021	-.019	.584
.602							-.019			.602
.620							-.018			.620
.638	-.006	-.022		-.020	-.019		-.016		-.017	.638
.655							-.014			.655
.673							-.013			.673
.691	-.005	-.019	-.019		-.016	-.014		-.015	-.016	.691
.709							-.010			.709
.727							-.009			.727
.745	-.005	-.010		-.014	-.012		-.008		-.015	.745
.763							-.007			.763
.781							-.008			.781
.799							-.007			.799
.817	-.002	-.013	-.013	-.010	-.008	-.008	-.004	-.011	-.013	.817
.834							-.004			.834
.870							-.002			.870
.888							-.001			.888
.921	-.106									.921
.924	-.000	-.011		-.010			-.001			.924
.947							-.003			.947
.964							-.002			.964
.981	.008	-.009	-.009		-.006	-.005	-.004	-.006	-.009	.981
.984					-.006				-.014	.984
.998							-.008			.998
1.000	-.108									1.000

Nose rake			Base rake		
Orifice station, y, in.	Cp top	Cp side	Orifice station, y, in.	Cp top	Cp side
.010	.799	.304	.031	.453	.335
.030	2.268	1.667	.094	.961	.652
.050	3.186	2.681	.156	1.197	.824
.070	2.526	2.384	.219	1.508	1.013
.090	2.420	2.203	.281	1.660	1.219
.110	2.429	2.154	.344	1.689	1.405
.130	2.448	2.133	.406	1.699	1.561
.150	2.452	2.123	.469	1.714	1.622
.170	2.440	2.118	.750	1.717	
.190	2.335	2.039	1.000	1.730	
			1.250	1.741	
			1.500	1.613	

[redacted]

TABLE 3. - PRESSURE COEFFICIENTS FOR AN INTERCONTINENTAL BALLISTIC MISSILE FOR NOSE I WITH FIXED TRANSITION AT M = 2.98 - Continued

(d) $\alpha = 0^{\circ}$

Model station, $\frac{x}{l}$	Cp for meridian angle, θ, deg –									Model station, $\frac{x}{l}$
	0	90	105	120	150	165	180	225	270	
-.055							1.759			-.055
-.037							.176			-.037
-.018							.145			-.018
.002		.148					.110	.120		.002
.029							.066			.029
.041							.046			.041
.060		.070	.070	.064	.071	.070	.070			.060
.075	.081	.077	.075	.077	.077	.078	.081	.085		.075
.085	.098	.102	.100	.106	.106	.110	.105	.105	.093	.085
.096	.123									.096
.126		.106	.106	.106	.108	.106	.108	.111	.106	.126
.143							-.040			.143
.154	-.029	-.038	-.038	-.038	-.039		-.038	-.038	-.033	.154
.171							-.036			.171
.189							-.032			.189
.206	-.026	-.030	-.029	-.030	-.029	-.030	-.030	-.029	-.030	.206
.223							-.027			.223
.241							-.026			.241
.258	-.021	-.022	-.022	-.023	-.023	-.022	-.024	-.024	-.019	.258
.275							-.023			.275
.293							-.021			.293
.310	-.017	-.018	-.018	-.018	-.019	-.018	-.020	-.018	-.017	.310
.327							-.017			.327
.344							-.016			.344
.362	-.013	-.015	-.013	-.013	-.015	-.015	-.015	-.013	-.014	.362
.379							-.014			.379
.396	-.011	-.011	-.011	-.012	-.011	-.013	-.013	-.013	-.011	.396
.408							-.011			.408
.426	.078	.067	.072	.069	.068	.072	.071	.071	.075	.426
.451	.085	.080	.079	.080	.082	.081	.082	.081	.085	.451
.476	.079	.075	.074	.075	.078	.077	.078	.079	.079	.476
.501	.076		.070	.070	.072	.073	.072		.075	.501
.530	-.015	-.017	-.018	-.018	-.015		-.016	-.015	-.015	.530
.548							-.017			.548
.566							-.015			.566
.584	-.015	-.019	-.018	-.018	-.018	-.017	-.015	-.014	-.014	.584
.602							-.013			.602
.620							-.013			.620
.638	-.011	-.015		-.013	-.014		-.011		-.010	.638
.655							-.011			.655
.673							-.011			.673
.691	-.011	-.013	-.012		-.012	-.013		-.011	-.010	.691
.709							-.011			.709
.727							-.008			.727
.745	-.008	-.002		-.008	-.009		-.008		-.008	.745
.763							-.007			.763
.781							-.008			.781
.799							-.007			.799
.817	-.006	-.005	-.005	-.004	-.006	-.005	-.003	-.006	-.005	.817
.834							-.005			.834
.870							-.006			.870
.888							-.006			.888
.921	-.102									.921
.924	-.002	-.003		-.006			-.002			.924
.947							-.003			.947
.964							-.001			.964
.981	.005	-.003	-.005		-.002	-.000	-.002	-.002	-.002	.981
.984					-.007				-.007	.984
.998							-.003			.998
1.000	-.104									1.000

Nose rake			Base rake		
Orifice station, y, in.	Cp top	Cp side	Orifice station, y, in.	Cp top	Cp side
.010	.795	.300	.031	.446	.332
.030	2.269	1.658	.094	.957	.651
.050	3.181	2.678	.156	1.190	.820
.070	2.520	2.374	.219	1.512	1.017
.090	2.415	2.202	.281	1.662	1.212
.110	2.425	2.152	.344	1.693	1.407
.130	2.441	2.127	.406	1.708	1.554
.150	2.447	2.121	.469	1.713	1.622
.170	2.435	2.113	.750	1.710	
.190	2.332	2.036	1.000	1.726	
			1.250	1.734	
			1.500	1.612	

[redacted]

TABLE 3. - PRESSURE COEFFICIENTS FOR AN INTERCONTINENTAL BALLISTIC MISSILE FOR NOSE I WITH FIXED TRANSITION AT M = 2.98 - Continued

(e) $\alpha = 3.0^{\circ}$

Model station, $\frac{x}{l}$	Cp for meridian angle, θ, deg –									Model station, $\frac{x}{l}$
	0	90	105	120	150	165	180	225	270	
-.055							1.758			-.055
-.037							.301			-.037
-.018							.247			-.018
.002		.146					.215	.204		.002
.029							.167			.029
.041							.130			.041
.060		.068	.074	.081	.106	.110	.109			.060
.075	.054	.073	.084	.092	.113	.118	.122	.110		.075
.085	.072	.100	.107	.125	.140	.153	.146	.130	.092	.085
.096	.088									.096
.126		.103	.113	.123	.142	.146	.152	.150	.102	.126
.143							-.018			.143
.154	-.046	-.039	-.032	-.029	-.020		-.016	-.025	-.032	.154
.171							-.014			.171
.189							-.012			.189
.206	-.041	-.032	-.026	-.023	-.013	-.010	-.010	-.018	-.030	.206
.223							-.008			.223
.241							-.007			.241
.258	-.030	-.027	-.023	-.019	-.010	-.007	-.006	-.015	-.023	.258
.275							-.006			.275
.293							-.006			.293
.310	-.023	-.024	-.021	-.017	-.009	-.007	-.003	-.012	-.023	.310
.327							-.003			.327
.344							-.005			.344
.362	-.015	-.022	-.018	-.014	-.008	-.006	-.003	-.009	-.021	.362
.379							-.004			.379
.396	-.011	-.021	-.019	-.015	-.008	-.006	-.003	-.010	-.018	.396
.408							-.004			.408
.426	.070	.054	.065	.068	.080	.088	.089	.077	.058	.426
.451	.081	.067	.070	.077	.093	.093	.096	.086	.070	.451
.476	.073	.064	.066	.074	.087	.092	.093	.079	.067	.476
.501	.065		.064	.069	.085	.088	.091		.065	.501
.530	-.013	-.023	-.022	-.019	-.011		-.007	-.013	-.021	.530
.548							-.008			.548
.566							-.005			.566
.584	-.020	-.023	-.020	-.018	-.011	-.009	-.005	-.010	-.020	.584
.602							-.004			.602
.620							-.004			.620
.638	-.017	-.019		-.014	-.008		-.003		-.016	.638
.655							-.002			.655
.673							-.003			.673
.691	-.013	-.018	-.016		-.009	-.008		-.008	-.016	.691
.709							-.003			.709
.727							-.002			.727
.745	-.009	-.009		-.011	-.006		-.001		-.014	.745
.763							-.002			.763
.781							-.005			.781
.799							-.006			.799
.817	-.005	-.012	-.011	-.010	-.007	-.006	-.004	-.010	-.012	.817
.834							-.003			.834
.870							.000			.870
.888							.001			.888
.921	-.099									.921
.924	-.002	-.012		-.008			.003			.924
.947							.001			.947
.964							.002			.964
.981	.004	-.009	-.009		-.000	.000	.000	-.002	-.010	.981
.984					-.003				-.015	.984
.998							-.003			.998
1.000	-.102									1.000

Nose rake			Base rake		
Orifice station, y, in.	Cp top	Cp side	Orifice station, y, in.	Cp top	Cp side
.010	.319	.480	.031	.289	.328
.030	1.589	1.882	.094	.534	.662
.050	2.120	2.315	.156	.636	.853
.070	2.240	2.310	.219	.746	1.054
.090	2.226	2.315	.281	.828	1.273
.110	2.223	2.294	.344	.906	1.451
.130	2.219	2.257	.406	.977	1.578
.150	2.202	2.191	.469	1.040	1.646
.170	2.177	2.131	.750	1.362	
.190	2.074	2.017	1.000	1.622	
			1.250	1.706	
			1.500	1.577	

[redacted]

[redacted]

TABLE 3. - PRESSURE COEFFICIENTS FOR AN INTERCONTINENTAL BALLISTIC MISSILE FOR NOSE I WITH FIXED TRANSITION AT $M = 2.98$ - Continued

(f) $\alpha = 6.3^{\circ}$

Model station, $\frac{x}{l}$	Cp for meridian angle, θ, deg – 0	90	105	120	150	165	180	225	270	Model station, $\frac{x}{l}$
-.055							1.763			-.055
-.037							.369			-.037
-.018							.313			-.018
.002		.145					.271	.235		.002
.029							.225			.029
.041							.183			.041
.060		.062	.082	.100	.146	.155	.160			.060
.075	.021	.066	.088	.112	.151	.164	.173	.139		.075
.085	.037	.092	.110	.144	.185	.204	.201	.164	.082	.085
.096	.072									.096
.126		.093	.117	.139	.187	.199	.206	.180	.091	.126
.143							.008			.143
.154	-.058	-.044	-.033	-.019	.001		.012	-.002	-.040	.154
.171							.013			.171
.189							.014			.189
.206	-.052	-.041	-.030	-.016	.005	.012	.015	-.004	-.040	.206
.223							.018			.223
.241							.018			.241
.258	-.037	-.040	-.031	-.017	.007	.015	.017	-.004	-.035	.258
.275							.017			.275
.293							.016			.293
.310	-.026	-.042	-.033	-.019	.005	.012	.015	-.004	-.041	.310
.327							.015			.327
.344							.014			.344
.362	-.017	-.045	-.035	-.021	.003	.011	.014	-.006	-.043	.362
.379							.013			.379
.396	-.013	-.046	-.038	-.024	.002	.010	.013	-.008	-.045	.396
.408							.013			.408
.426	.065	.016	.037	.056	.100	.117	.121	.083	.017	.426
.451	.075	.026	.041	.063	.109	.118	.126	.089	.030	.451
.476	.068	.026	.038	.061	.105	.119	.125	.092	.030	.476
.501	.059		.038	.059	.103	.116	.124		.031	.501
.530	-.023	-.045	-.039	-.027	-.001		.010	-.010	-.043	.530
.548							.013			.548
.566							.012			.566
.584	-.027	-.044	-.037	-.027	-.001	.005	.012	-.008	-.041	.584
.602							.011			.602
.620							.013			.620
.638	-.021	-.041		-.024	-.001		.013		-.038	.638
.655							.012			.655
.673							.008			.673
.691	-.017	-.041	-.036		-.004	.005		-.009	-.039	.691
.709							.007			.709
.727							.008			.727
.745	-.013	-.032		-.027	-.004		.011		-.038	.745
.763							.010			.763
.781							.010			.781
.799							.015			.799
.817	-.009	-.037	-.035	-.025	.000	.010	.013	-.011	-.037	.817
.834							.015			.834
.870							.012			.870
.888							.013			.888
.921	-.107									.921
.924	-.007	-.035		-.027			.011			.924
.947							.012			.947
.964							.013			.964
.981	.003	-.033	-.035		.000	.009	.012	-.012	-.032	.981
.984					-.002				-.037	.984
.998							.012			.998
1.000	-.109									1.000

Nose rake			Base rake		
Orifice station, y, in.	Cp top	Cp side	Orifice station, y, in.	Cp top	Cp side
.010	.256	.503	.031	.525	.286
.030	.479	2.157	.094	1.223	.778
.050	.809	2.538	.156	1.314	1.021
.070	1.536	2.292	.219	1.389	1.300
.090	2.238	2.164	.281	1.428	1.449
.110	2.244	2.104	.344	1.460	1.502
.130	2.059	2.083	.406	1.487	1.518
.150	1.984	2.098	.469	1.516	1.527
.170	1.973	2.082	.750	1.587	
.190	1.890	1.998	1.000	1.660	
			1.250	1.687	
			1.500	1.569	

[redacted]

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TABLE 3. - PRESSURE COEFFICIENTS FOR AN INTERCONTINENTAL BALLISTIC MISSILE FOR NOSE I WITH FIXED TRANSITION AT M = 2.98 - Concluded

(g) $\alpha = 10.1^{\circ}$

Model station, $\frac{x}{l}$	Cp for meridian angle, θ, deg –									Model station, $\frac{x}{l}$
	0	90	105	120	150	165	180	225	270	
-.055							1.757			-.055
-.037							.459			-.037
-.018							.400			-.018
.002		.140					.364	.303		.002
.029							.307			.029
.041							.268			.041
.060		.050	.086	.123	.201	.220	.229			.060
.075	-.001	.052	.093	.135	.209	.232	.246	.180		.075
.085	.011	.076	.112	.168	.247	.278	.277	.204	.069	.085
.096	.038									.096
.126		.075	.117	.162	.249	.271	.282	.217	.068	.126
.143							.049			.143
.154	-.068	-.051	-.030	-.006	.035		.058	.020	-.053	.154
.171							.058			.171
.189							.058			.189
.206	-.060	-.054	-.033	-.008	.039	.052	.058	.022	-.053	.206
.223							.058			.223
.241							.057			.241
.258	-.040	-.059	-.038	-.011	.037	.052	.056	.010	-.053	.258
.275							.054			.275
.293							.053			.293
.310	-.028	-.065	-.043	-.017	.030	.047	.055	.007	-.065	.310
.327							.053			.327
.344							.051			.344
.362	-.020	-.072	-.049	-.021	.028	.043	.049	.007	-.070	.362
.379							.048			.379
.396	-.016	-.075	-.054	-.025	.026	.041	.049	.004	-.073	.396
.408							.047			.408
.426	.073	-.030	.012	.054	.136	.166	.174	.103	-.028	.426
.451	.083	-.023	.014	.058	.143	.164	.177	.108	-.017	.451
.476	.078	-.025	.013	.056	.140	.167	.178	.110	-.017	.476
.501	.063		.014	.055	.139	.162	.177		-.019	.501
.530	-.031	-.076	-.054	-.029	.022		.044	.003	-.074	.530
.548							.047			.548
.566							.048			.566
.584	-.035	-.078	-.056	-.029	.021	.036	.044	.003	-.076	.584
.602							.047			.602
.620							.045			.620
.638	-.029	-.078		-.029	.020		.047		-.078	.638
.655							.047			.655
.673							.046			.673
.691	-.029	-.081	-.059		.016	.036		.001	-.081	.691
.709							.045			.709
.727							.046			.727
.745	-.026	-.073		-.032	.020		.046		-.082	.745
.763							.045			.763
.781							.040			.781
.799							.040			.799
.817	-.026	-.080	-.061	-.035	.019	.037	.046	-.005	-.081	.817
.834							.041			.834
.870							.044			.870
.888							.042			.888
.921	-.116									.921
.924	-.026	-.061		-.040			.041			.924
.947							.035			.947
.964							.040			.964
.981	-.013	-.050	-.069		.015	.035	.043	-.008	-.050	.981
.984					.014				-.062	.984
.998							.043			.998
1.000	-.118									1.000

Nose rake			Base rake		
Orifice station, y, in.	Cp top	Cp side	Orifice station, y, in.	Cp top	Cp side
.010	.218	.364	.031	.551	.101
.030	.367	1.897	.094	1.372	.434
.050	.545	2.661	.156	1.441	.994
.070	.748	2.029	.219	1.453	1.173
.090	1.003	1.963	.281	1.450	1.296
.110	1.212	1.983	.344	1.452	1.304
.130	1.365	2.005	.406	1.456	1.265
.150	1.530	2.017	.469	1.453	1.223
.170	1.675	2.010	.750	1.448	
.190	1.707	1.938	1.000	1.466	
			1.250	1.521	
			1.500	1.471	

[redacted]

TABLE 4. - PRESSURE COEFFICIENTS FOR AN INTERCONTINENTAL BALLISTIC

MISSILE FOR NOSE II WITH NATURAL TRANSITION AT $M = 1.57$

(a) $\alpha = -10.1^{\circ}$

Model station, $\frac{x}{l}$	Cp for meridian angle, θ, deg –									Model station, $\frac{x}{l}$
	0	90	105	120	150	165	180	225	270	
-.002							1.502			-.002
.008							.634			.008
.018							.410			.018
.029		.334					.177	.194		.029
.039							-.018			.039
.050							-.129			.050
.060		-.006	-.049	-.082	-.124	-.130	-.137			.060
.075	.259	.028	-.013	-.042	-.070	-.077	-.077	-.067		.075
.085	.320	.075	.029	-.000	-.038	-.041	-.036	-.053	.035	.085
.096	.391									.096
.126		.090	.040	.017	.038	.047	.038	.025	.077	.126
.143							-.212			.143
.154	-.009	-.178	-.206	-.211	-.200	-.184	-.170	-.216		.154
.171							-.146			.171
.189							-.114			.189
.206	.022	-.159	-.172	-.174	-.120	-.099	-.089	-.135		.206
.223							-.064			.223
.241							-.048			.241
.258	.021	-.154	-.162	-.136	-.068	-.043	-.036	-.084	-.158	.258
.275							-.027			.275
.293							-.015			.293
.310	.019	-.154	-.143	-.089	-.050	-.025	-.010	-.058	-.152	.310
.327							-.008			.327
.344							-.006			.344
.362	.016	-.139	-.106	-.067	-.056	-.024	-.002	-.051	-.128	.362
.379							-.003			.379
.396	.012	-.120	-.095	-.053	-.057	-.021	.006	-.043	-.110	.396
.408							-.001			.408
.426	.229	.068	.089	.079	.056	.165	.229	.085	.090	.426
.451	.216	.062	.057	.069	.052	.109	.150		.066	.451
.476	.208	.046	.037	.058	.036	.093	.113	.074	.052	.476
.501	.197	.036	.031	.043	.015	.066	.081	.048	.042	.501
.530	-.003	-.133	-.139	-.115	-.105	-.134	-.114	-.083	-.132	.530
.548							-.122			.548
.566							-.083			.566
.584	.025	-.121	-.106	-.091	-.096	-.084	-.061	-.078	-.120	.584
.602							-.053			.602
.620							-.046			.620
.638	.032	-.104		-.086	-.055				-.094	.638
.655							-.031			.655
.673							-.025			.673
.691	.030	-.128	-.113	-.074	-.049	-.049	-.024	-.036	-.100	.691
.709							-.025			.709
.727							-.022			.727
.745	.027	-.121		-.057	-.040		-.020		-.094	.745
.763							-.019			.763
.781							-.029			.781
.799							-.022			.799
.817	.044	-.099	-.068	-.041	-.037	-.033	-.009	-.028	-.075	.817
.834							-.016			.834
.852							-.012			.852
.870							-.006			.870
.888							-.007			.888
.906							-.004			.906
.921	-.210									.921
.924	.050	-.075		-.034	-.034		-.000		-.077	.924
.947							.000			.947
.964							.033			.964
.981	.067	-.060	-.021		-.013	-.021	.021	-.002	-.048	.981
1.000	-.217									1.000

Nose rake			Base rake		
Orifice station, y, in.	Cp top	Cp side	Orifice station, y, in.	Cp top	Cp side
.010	1.392	.991	.031	.859	.423
.030	1.532	1.352	.094	1.575	1.058
.050	1.574	1.444	.156	1.641	1.528
.070	1.594	1.485	.219	1.573	1.621
.090	1.615	1.489	.281	1.584	1.504
.110	1.630	1.490	.344	1.572	1.477
.130	1.625	1.494	.406	1.574	1.496
.150	1.627	1.490	.469	1.576	1.486
.170	1.610	1.472	.750	1.569	
.190	1.544	1.383	1.000	1.571	
			1.250	1.573	
			1.500	1.582	

[redacted]

TABLE 4. - PRESSURE COEFFICIENTS FOR AN INTERCONTINENTAL BALLISTIC MISSILE FOR NOSE II WITH NATURAL TRANSITION AT M = 1.57 - Continued

(b) $\alpha = -6.3^{\circ}$

Model station, $\frac{x}{l}$	Cp for meridian angle, θ, deg – 0	90	105	120	150	165	180	225	270	Model station, $\frac{x}{l}$
-.002							1.543			-.002
.008							.729			.008
.018							.502			.018
.029		.363					.245	.265		.029
.039							.037			.039
.050							-.079			.050
.060		.008	-.018	-.040	-.074	-.078	-.083			.060
.075	.173	.049	.022	-.000	-.018	-.026	-.032	-.010		.075
.085	.229	.100	.092	.061	.019	.018	.014	.015	.117	.085
.096	.294									.096
.126		.126	.099	.084	.086	.081	.062	.087	.115	.126
.143							-.206			.143
.154	-.064	-.146	-.156	-.162	-.180	-.176	-.163	-.172		.154
.171							-.142			.171
.189							-.112			.189
.206	-.024	-.108	-.118	-.127	-.097	-.087	-.084	-.105		.206
.223							-.060			.223
.241							-.049			.241
.258	-.017	-.086	-.085	-.075	-.051	-.039	-.040	-.056	-.085	.258
.275							-.032			.275
.293							-.024			.293
.310	-.010	-.065	-.065	-.051	-.030	-.018	-.016	-.032	-.068	.310
.327							-.010			.327
.344							-.005			.344
.362	-.009	-.058	-.047	-.031	-.019	-.010	-.006	-.017	-.055	.362
.379							-.007			.379
.396	-.008	-.049	-.044	-.037	-.018	-.009	.001	-.022	-.047	.396
.408							.014			.408
.426	.201	.141	.143	.140	.136	.155	.169	.136	.145	.426
.451	.186	.123	.117	.116	.120	.127	.140		.120	.451
.476	.178	.105	.095	.095	.097	.103	.113	.102	.106	.476
.501	.165	.093	.085	.077	.069	.082	.097	.076	.093	.501
.530	-.031	-.091	-.100	-.103	-.079	-.088	-.098	-.074	-.094	.530
.548							-.080			.548
.566							-.057			.566
.584	-.004	-.072	-.066	-.066	-.063	-.061	-.051	-.061	-.073	.584
.602							-.043			.602
.620							-.034			.620
.638	.004	-.057		-.051	-.039				-.056	.638
.655							-.016			.655
.673							-.019			.673
.691	.002	-.063	-.056	-.044	-.031	-.027	-.007	-.023	-.048	.691
.709							-.013			.709
.727							-.011			.727
.745	.007	-.053		-.035	-.021		-.008		-.041	.745
.763							-.004			.763
.781							-.013			.781
.799							-.004			.799
.817	.018	-.042	-.034	-.022	-.014	-.007	.005	-.010	-.027	.817
.834							.000			.834
.852							.004			.852
.870							.009			.870
.888							.011			.888
.906							.010			.906
.921	-.155									.921
.924	.015	-.022		-.016	-.003		.015		-.033	.924
.947							.014			.947
.964							.073			.964
.981	.062	-.015	-.006		.027	.037	.049	.014	-.014	.981
1.000	-.162									1.000

Nose rake			Base rake		
Orifice station, y, in.	Cp top	Cp side	Orifice station, y, in.	Cp top	Cp side
.010	1.304	1.039	.031	.743	.525
.030	1.481	1.363	.094	1.291	.931
.050	1.551	1.453	.156	1.590	1.274
.070	1.578	1.486	.219	1.580	1.516
.090	1.597	1.491	.281	1.556	1.552
.110	1.606	1.495	.344	1.561	1.517
.130	1.610	1.496	.406	1.562	1.517
.150	1.606	1.492	.469	1.566	1.522
.170	1.587	1.479	.750	1.555	
.190	1.520	1.388	1.000	1.561	
			1.250	1.557	
			1.500	1.549	

[redacted]

TABLE 4. - PRESSURE COEFFICIENTS FOR AN INTERCONTINENTAL BALLISTIC MISSILE FOR NOSE II WITH NATURAL TRANSITION AT M = 1.57 - Continued

(c) $\alpha = -3.0^{\circ}$

Model station, $\frac{x}{l}$	Cp for meridian angle, θ, deg – 0	90	105	120	150	165	180	225	270	Model station, $\frac{x}{l}$
-.002							1.558			-.002
.008							.810			.008
.018							.584			.018
.029		.374					.308	.310		.029
.039							.092			.039
.050							-.031			.050
.060		.014	-.000	-.011	-.035	-.037	-.042			.060
.075	.115	.059	.042	.033	.017	.014	.006	.024		.075
.085	.170	.112	.129	.085	.060	.065	.049	.060	.152	.085
.096	.229									.096
.126		.135	.125	.116	.116	.115	.096	.121	.131	.126
.143							-.187			.143
.154	-.099	-.130	-.136	-.142	-.153	-.152	-.144	-.151		.154
.171							-.126			.171
.189							-.105			.189
.206	-.052	-.082	-.085	-.100	-.087	-.087	-.087	-.088		.206
.223							-.071			.223
.241							-.058			.241
.258	-.035	-.052	-.056	-.060	-.050	-.045	-.047	-.051	-.054	.258
.275							-.035			.275
.293							-.025			.293
.310	-.023	-.039	-.037	-.029	-.023	-.017	-.018	-.024	-.041	.310
.327							-.016			.327
.344							-.015			.344
.362	-.014	-.023	-.020	-.018	-.019	-.013	-.011	-.016	-.024	.362
.379							-.011			.379
.396	-.016	-.021	-.022	-.020	-.012	-.007	-.000	-.014	-.021	.396
.408							.018			.408
.426	.191	.171	.172	.170	.163	.167	.166	.182	.168	.426
.451	.169	.151	.147	.143	.138	.136	.140		.145	.451
.476	.153	.129	.120	.118	.117	.116	.118	.124	.132	.476
.501	.140	.113	.110	.103	.098	.097	.102	.107	.112	.501
.530	-.052	-.073	-.077	-.083	-.080	-.081	-.079	-.074	-.077	.530
.548							-.063			.548
.566							-.047			.566
.584	-.018	-.049	-.050	-.051	-.045	-.050	-.047	-.045	-.051	.584
.602							-.043			.602
.620							-.034			.620
.638	-.015	-.028		-.032	-.028				-.027	.638
.655							-.023			.655
.673							-.021			.673
.691	-.010	-.034	-.034	-.033	-.031	-.026	-.014	-.016	-.025	.691
.709							-.008			.709
.727							-.012			.727
.745	-.009	-.028		-.020	-.012		-.005		-.017	.745
.763							-.008			.763
.781							-.013			.781
.799							-.004			.799
.817	.009	-.013	-.014	-.012	-.006	-.003	.000	-.003	.000	.817
.834							-.003			.834
.852							.003			.852
.870							.004			.870
.888							.008			.888
.906							.009			.906
.921	-.091									.921
.924	.019	-.000		-.007	.003		.012		-.012	.924
.947							.009			.947
.964							.013			.964
.981	.046	.012	.005		.008	.009	.008	.002	.006	.981
1.000	-.096									1.000

Nose rake			Base rake		
Orifice station, y, in.	Cp top	Cp side	Orifice station, y, in.	Cp top	Cp side
.010	1.227	1.056	.031	.637	.533
.030	1.447	1.371	.094	1.016	.793
.050	1.533	1.459	.156	1.308	1.021
.070	1.566	1.485	.219	1.498	1.237
.090	1.579	1.497	.281	1.529	1.403
.110	1.591	1.501	.344	1.541	1.491
.130	1.593	1.504	.406	1.541	1.522
.150	1.588	1.498	.469	1.548	1.533
.170	1.571	1.486	.750	1.542	
.190	1.498	1.395	1.000	1.553	
			1.250	1.553	
			1.500	1.553	

[redacted]

TABLE 4. - PRESSURE COEFFICIENTS FOR AN INTERCONTINENTAL BALLISTIC MISSILE FOR NOSE II WITH NATURAL TRANSITION AT M = 1.57 - Continued

(d) $\alpha = 0^{\circ}$

Model station, $\frac{x}{l}$	Cp for meridian angle, θ, deg – 0	90	105	120	150	165	180	225	270	Model station, $\frac{x}{l}$
-.002							1.553			-.002
.008							.889			.008
.018							.651			.018
.029		.377					.366	.358		.029
.039							.152			.039
.050							.018			.050
.060		.021	.016	.016	.010	.011	.008			.060
.075	.060	.060	.061	.063	.056	.061	.054	.060		.075
.085	.114	.113	.118	.115	.109	.116	.096	.107	.163	.085
.096	.159									.096
.126		.141	.143	.144	.153	.156	.138	.141	.137	.126
.143							-.166			.143
.154	-.128	-.123	-.127	-.127	-.130	-.132	-.124	-.136		.154
.171							-.110			.171
.189							-.089			.189
.206	-.075	-.076	-.075	-.084	-.074	-.074	-.074	-.074		.206
.223							-.058			.223
.241							-.052			.241
.258	-.051	-.041	-.044	-.044	-.047	-.046	-.050	-.042	-.041	.258
.275							-.046			.275
.293							-.036			.293
.310	-.025	-.032	-.033	-.026	-.027	-.021	-.021	-.026	-.033	.310
.327							-.017			.327
.344							-.017			.344
.362	-.017	-.015	-.011	-.009	-.019	-.016	-.015	-.014	-.014	.362
.379							-.016			.379
.396	-.017	-.010	-.014	-.016	-.014	-.013	-.006	-.014	-.010	.396
.408							-.012			.408
.426	.178	.176	.179	.179	.177	.181	.177	.177	.175	.426
.451	.154	.157	.156	.158	.155	.150	.154		.155	.451
.476	.135	.136	.134	.132	.131	.130	.131	.134	.141	.476
.501	.117	.119	.121	.117	.118	.116	.118	.119	.123	.501
.530	-.068	-.066	-.068	-.072	-.070	-.071	-.069	-.068	-.069	.530
.548							-.055			.548
.566							-.043			.566
.584	-.027	-.041	-.040	-.042	-.041	-.042	-.036	-.039	-.043	.584
.602							-.034			.602
.620							-.032			.620
.638	-.026	-.021		-.022	-.022				-.019	.638
.655							-.021			.655
.673							-.021			.673
.691	-.017	-.026	-.025	-.024	-.032	-.028	-.015	-.015	-.017	.691
.709							-.014			.709
.727							-.010			.727
.745	-.013	-.019		-.015	-.014		-.008		-.009	.745
.763							-.009			.763
.781							-.017			.781
.799							-.008			.799
.817	.003	-.007	-.007	-.007	-.007	-.004	-.001	-.001	.006	.817
.834							-.006			.834
.852							.001			.852
.870							.002			.870
.888							.006			.888
.906							.007			.906
.921	-.074									.921
.924	.013	.007		-.005	.004		.009		-.002	.924
.947							.007			.947
.964							.012			.964
.981	.048	.025	.011		.011	.008	.006	.007	.009	.981
1.000	-.076									1.000

Nose rake			Base rake		
Orifice station, y, in.	Cp top	Cp side	Orifice station, y, in.	Cp top	Cp side
.010	1.122	1.041	.031	.502	.512
.030	1.402	1.363	.094	.735	.715
.050	1.511	1.458	.156	.915	.868
.070	1.544	1.480	.219	1.086	1.033
.090	1.556	1.492	.281	1.225	1.178
.110	1.563	1.501	.344	1.353	1.305
.130	1.561	1.501	.406	1.443	1.411
.150	1.558	1.494	.469	1.493	1.477
.170	1.536	1.482	.750	1.513	
.190	1.465	1.388	1.000	1.521	
			1.250	1.528	
			1.500	1.535	

[redacted]

TABLE 4. - PRESSURE COEFFICIENTS FOR AN INTERCONTINENTAL BALLISTIC MISSILE FOR NOSE II WITH NATURAL TRANSITION AT M = 1.57 - Continued

(e) $\alpha = 3.0^{\circ}$

Model station, $\frac{x}{l}$	Cp for meridian angle, θ, deg – 0	90	105	120	150	165	180	225	270	Model station, $\frac{x}{l}$
-.002							1.556			-.002
.008							.978			.008
.018							.737			.018
.029		.378					.441	.408		.029
.039							.222			.039
.050							.077			.050
.060		.017	.027	.042	.059	.064	.064			.060
.075	.010	.060	.075	.088	.103	.117	.109	.093		.075
.085	.072	.111	.129	.142	.157	.171	.149	.147	.146	.085
.096	.167									.096
.126		.136	.152	.165	.193	.202	.187	.168	.130	.126
.143							-.138			.143
.154	-.149	-.129	-.124	-.117	-.107	-.104	-.096	-.118		.154
.171							-.085			.171
.189							-.068			.189
.206	-.084	-.084	-.073	-.078	-.059	-.055	-.055	-.067		.206
.223							-.041			.223
.241							-.039			.241
.258	-.049	-.050	-.050	-.047	-.037	-.032	-.036	-.041	-.051	.258
.275							-.039			.275
.293							-.034			.293
.310	-.022	-.039	-.042	-.035	-.029	-.023	-.022	-.034	-.041	.310
.327							-.015			.327
.344							-.014			.344
.362	-.012	-.025	-.021	-.016	-.019	-.013	-.012	-.019	-.023	.362
.379							-.015			.379
.396	-.011	-.018	-.022	-.023	-.016	-.014	-.006	-.021	-.018	.396
.408							-.014			.408
.426	.167	.171	.175	.177	.181	.190	.186	.177	.166	.426
.451	.141	.151	.154	.159	.171	.168	.173		.145	.451
.476	.120	.130	.133	.137	.147	.148	.150	.143	.132	.476
.501	.100	.113	.121	.122	.136	.136	.140	.131	.114	.501
.530	-.076	-.072	-.069	-.070	-.059	-.056	-.052	-.061	-.077	.530
.548							-.039			.548
.566							-.029			.566
.584	-.041	-.047	-.042	-.040	-.031	-.031	-.023	-.034	-.050	.584
.602							-.021			.602
.620							-.021			.620
.638	-.029	-.027		-.023	-.016				-.026	.638
.655							-.011			.655
.673							-.013			.673
.691	-.015	-.034	-.029	-.027	-.031	-.024	-.009	-.017	-.025	.691
.709							-.008			.709
.727							-.008			.727
.745	-.010	-.025		-.018	-.011		-.002		-.016	.745
.763							-.008			.763
.781							-.017			.781
.799							-.005			.799
.817	.003	-.014	-.012	-.012	-.007	-.002	.003	-.004	-.002	.817
.834							-.003			.834
.852							.005			.852
.870							.006			.870
.888							.008			.888
.906							.010			.906
.921	-.084									.921
.924	.006	.001		-.010	.003		.013		-.009	.924
.947							.012			.947
.964							.016			.964
.981	.061	.016	.003		.011	.010	.010	.005	.002	.981
1.000	-.091									1.000

Nose rake			Base rake		
Orifice station, y, in.	C_p top	C_p side	Orifice station, y, in.	C_p top	C_p side
.010	.716	1.037	.031	.457	.534
.030	1.207	1.364	.094	.642	.783
.050	1.493	1.453	.156	.763	.994
.070	1.575	1.485	.219	.867	1.206
.090	1.598	1.492	.281	.953	1.371
.110	1.594	1.500	.344	1.044	1.469
.130	1.570	1.501	.406	1.127	1.513
.150	1.546	1.496	.469	1.195	1.527
.170	1.511	1.481	.750	1.413	
.190	1.419	1.393	1.000	1.487	
			1.250	1.504	
			1.500	1.516	

[redacted]

TABLE 4. - PRESSURE COEFFICIENTS FOR AN INTERCONTINENTAL BALLISTIC MISSILE FOR NOSE II WITH NATURAL TRANSITION AT M = 1.57 - Continued

(f) $\alpha = 6.3^{\circ}$

Model station, $\frac{x}{l}$	Cp for meridian angle, θ, deg – 0	90	105	120	150	165	180	225	270	Model station, $\frac{x}{l}$
-.002							1.556			-.002
.008							1.064			.008
.018							.814			.018
.029		.362					.520	.458		.029
.039							.299			.039
.050							.142			.050
.060		.011	.036	.067	.112	.124	.128			.060
.075	-.033	.054	.080	.109	.153	.178	.173	.127		.075
.085	.029	.102	.136	.165	.210	.233	.211	.189	.103	.085
.096	.126									.096
.126		.118	.151	.181	.237	.255	.244	.196	.110	.126
.143							-.103			.143
.154	-.169	-.141	-.127	-.108	-.079	-.068	-.059	-.103		.154
.171							-.051			.171
.189							-.037			.189
.206	-.087	-.104	-.089	-.081	-.040	-.029	-.026	-.061		.206
.223							-.016			.223
.241							-.017			.241
.258	-.041	-.086	-.081	-.058	-.026	-.013	-.015	-.044	-.085	.258
.275							-.017			.275
.293							-.014			.293
.310	-.017	-.069	-.067	-.051	-.025	-.011	-.007	-.044	-.069	.310
.327							-.013			.327
.344							-.013			.344
.362	-.006	-.061	-.059	-.046	-.024	-.012	-.008	-.038	-.056	.362
.379							-.004			.379
.396	-.008	-.049	-.050	-.041	-.013	-.004	.004	-.033	-.046	.396
.408							-.005			.408
.426	.169	.141	.148	.155	.180	.200	.198	.166	.143	.426
.451	.139	.122	.129	.142	.171	.178	.186		.120	.451
.476	.113	.104	.112	.129	.166	.177	.183	.148	.106	.476
.501	.093	.093	.111	.122	.152	.159	.167	.142	.092	.501
.530	-.094	-.090	-.082	-.073	-.044	-.039	-.034	-.058	-.095	.530
.548							-.018			.548
.566							-.006			.566
.584	-.049	-.070	-.059	-.047	-.020	-.014	-.006	-.033	-.072	.584
.602							-.002			.602
.620							.007			.620
.638	-.030	-.056		-.030	-.003				-.053	.638
.655							.004			.655
.673							.001			.673
.691	-.019	-.062	-.054	-.040	-.026	-.013	.003	-.023	-.049	.691
.709							.001			.709
.727							.003			.727
.745	-.001	-.054		-.040	-.004		.008		-.041	.745
.763							.008			.763
.781							-.006			.781
.799							.001			.799
.817	.008	-.039	-.037	-.032	-.008	.004	.013	-.015	-.026	.817
.834							.005			.834
.852							.014			.852
.870							.015			.870
.888							.018			.888
.906							.018			.906
.921	-.147									.921
.924	.017	-.021		-.027	.004		.022		-.033	.924
.947							.021			.947
.964							.026			.964
.981	.070	-.013	-.020		.014	.017	.019	-.002	-.019	.981
1.000	-.162									1.000

Nose rake			Base rake		
Orifice station, y, in.	C_p top	C_p side	Orifice station, y, in.	C_p top	C_p side
.010	.565	1.004	.031	.694	.537
.030	1.037	1.351	.094	1.147	.939
.050	1.426	1.445	.156	1.374	1.278
.070	1.551	1.483	.219	1.429	1.520
.090	1.579	1.495	.281	1.431	1.547
.110	1.574	1.496	.344	1.446	1.521
.130	1.550	1.500	.406	1.453	1.524
.150	1.522	1.492	.469	1.463	1.531
.170	1.482	1.481	.750	1.474	
.190	1.388	1.387	1.000	1.492	
			1.250	1.502	
			1.500	1.509	

[redacted]

TABLE 4. - PRESSURE COEFFICIENTS FOR AN INTERCONTINENTAL BALLISTIC MISSILE FOR NOSE II WITH NATURAL TRANSITION AT $M = 1.57$ - Concluded

(g) $\alpha = 10.1^{\circ}$

Model station, $\frac{x}{l}$	Cp for meridian angle, θ, deg –									Model station, $\frac{x}{l}$
	0	90	105	120	150	165	180	225	270	
-.002							1.534			-.002
.008							1.157			.008
.018							.912			.018
.029		.329					.621	.512		.029
.039							.404			.039
.050							.226			.050
.060		-.001	.042	.096	.178	.204	.212			.060
.075	-.073	.034	.082	.134	.221	.260	.257	.171		.075
.085	-.009	.074	.134	.189	.279	.316	.295	.241	.030	.085
.096	.072									.096
.126		.085	.140	.194	.297	.327	.320	.223	.074	.126
.143							-.056			.143
.154	-.174	-.171	-.138	-.100	-.040	-.019	-.006	-.082		.154
.171							-.001			.171
.189							.011			.189
.206	-.088	-.151	-.122	-.090	-.010	.010	.019	-.049		.206
.223							.026			.223
.241							.021			.241
.258	-.036	-.146	-.122	-.085	-.003	.021	.021	-.047	-.147	.258
.275							.017			.275
.293							.016			.293
.310	-.011	-.151	-.129	-.083	-.014	.010	.020	-.054	-.147	.310
.327							.010			.327
.344							.012			.344
.362	-.001	-.133	-.132	-.095	-.017	.009	.020	-.056	-.119	.362
.379							.018			.379
.396	-.003	-.110	-.116	-.094	-.013	.011	.025	-.062	-.102	.396
.408							.013			.408
.426	.226	.074	.070	.090	.176	.219	.227	.132	.090	.426
.451	.149	.067	.072	.094	.172	.197	.213		.074	.451
.476	.111	.050	.066	.097	.173	.198	.209	.141	.058	.476
.501	.083	.042	.068	.093	.164	.186	.200	.135	.048	.501
.530	-.112	-.127	-.112	-.088	-.029	-.013	-.004	-.055	-.130	.530
.548							.010			.548
.566							.023			.566
.584	-.057	-.115	-.093	-.067	-.004	.013	.024	-.034	-.115	.584
.602							.038			.602
.620							.027			.620
.638	-.038	-.099		-.059	.005				-.086	.638
.655							.034			.655
.673							.029			.673
.691	-.023	-.120	-.098	-.071	-.016	.011	.032	-.031	-.095	.691
.709							.033			.709
.727							.028			.727
.745	-.012	-.113		-.072	.001		.032		-.087	.745
.763							.025			.763
.781							.013			.781
.799							.024			.799
.817	-.002	-.094	-.096	-.073	-.003	.024	.036	-.078	-.068	.817
.834							.028			.834
.852							.041			.852
.870							.034			.870
.888							.037			.888
.906							.038			.906
.921	-.200									.921
.924	.002	-.069		-.066	.000		.042		-.072	.924
.947							.041			.947
.964							.047			.964
.981	.046	-.052	-.070		.013	.031	.039	-.014	-.047	.981
1.000	-.209									1.000

Nose rake			Base rake		
Orifice station, y, in.	Cp top	Cp side	Orifice station, y, in.	Cp top	Cp side
.010	.473	.935	.031	.878	.445
.030	.894	1.313	.094	1.560	1.060
.050	1.338	1.431	.156	1.509	1.515
.070	1.517	1.475	.219	1.456	1.624
.090	1.556	1.485	.281	1.466	1.511
.110	1.549	1.490	.344	1.448	1.491
.130	1.515	1.496	.406	1.438	1.503
.150	1.484	1.486	.469	1.427	1.506
.170	1.436	1.470	.750	1.402	
.190	1.345	1.380	1.000	1.426	
			1.250	1.469	
			1.500	1.496	

[redacted]

TABLE 5. - PRESSURE COEFFICIENTS FOR AN INTERCONTINENTAL BALLISTIC MISSILE FOR NOSE II WITH FIXED TRANSITION AT M = 1.57

(a) $\alpha = -10.1^{\circ}$

Model station, $\frac{x}{l}$	Cp for meridian angle, θ, deg –									Model station, $\frac{x}{l}$
	0	90	105	120	150	165	180	225	270	
-.002							1.497			-.002
.008							.632			.008
.018							.407			.018
.029		.337					.172	.196		.029
.039							-.023			.039
.050							-.127			.050
.060		.001	-.041	-.087	-.133	-.125	-.140			.060
.075	.266	.029	-.014	-.041	-.072	-.075	-.092	-.033		.075
.085	.332	.076	.059	.013	-.022	-.021	-.036	-.044	.039	.085
.096	.491									.096
.126		.087	.039	.025	.038	.048	.042	.029	.075	.126
.143							-.214			.143
.154	-.008	-.178	-.200	-.208	-.194	-.182	-.173	-.215		.154
.171							-.145			.171
.189							-.114			.189
.206	.023	-.157	-.169	-.171	-.118	-.099	-.089	-.133		.206
.223							-.063			.223
.241							-.048			.241
.258	.023	-.152	-.161	-.133	-.066	-.044	-.035	-.082	-.156	.258
.275							-.023			.275
.293							-.019			.293
.310	.022	-.154	-.139	-.085	-.050	-.028	-.012	-.057	-.151	.310
.327							-.008			.327
.344							-.005			.344
.362	.017	-.136	-.103	-.064	-.054	-.027	-.002	-.048	-.126	.362
.379							-.001			.379
.396	.015	-.119	-.096	-.048	-.049	-.023	.009	-.039	-.110	.396
.408							.001			.408
.426	.229	.068	.092	.081	.059	.148	.239	.087	.089	.426
.451	.215	.065	.059	.071	.057	.102	.150		.067	.451
.476	.208	.046	.038	.059	.041	.086	.112	.077	.054	.476
.501	.198	.036	.032	.044	.019	.062	.082	.047	.044	.501
.530	-.001	-.133	-.138	-.114	-.101	-.133	-.114	-.082	-.130	.530
.548							-.122			.548
.566							-.075			.566
.584	.027	-.120	-.107	-.089	-.094	-.081	-.059	-.076	-.119	.584
.602							-.051			.602
.620							-.042			.620
.638	.032	-.108		-.083	-.052				-.099	.638
.655							-.028			.655
.673							-.028			.673
.691	.032	-.125	-.110	-.071	-.048	-.050	-.024	-.036	-.097	.691
.709							-.025			.709
.727							-.020			.727
.745	.030	-.119		-.055	-.038		-.019		-.093	.745
.763							-.018			.763
.781							-.027			.781
.799							-.019			.799
.817	.045	-.097	-.066	-.040	-.035	-.029	-.005	-.028	-.073	.817
.834							-.017			.834
.852							-.005			.852
.870							-.007			.870
.888							-.004			.888
.906							-.003			.906
.921	-.211									.921
.924	.050	-.075		-.031	-.030		.009		-.083	.924
.947							.032			.947
.964							.034			.964
.981	.037	-.053	-.009		-.009	-.011	.024	.002	-.042	.981
1.000	-.218									1.000

Nose rake			Base rake		
Orifice station, y, in.	Cp top	Cp side	Orifice station, y, in.	Cp top	Cp side
.010	1.173	1.108	.031	.929	.422
.030	1.456	1.508	.094	1.583	1.048
.050	1.562	1.566	.156	1.632	1.517
.070	1.597	1.489	.219	1.578	1.618
.090	1.618	1.451	.281	1.576	1.512
.110	1.628	1.450	.344	1.572	1.479
.130	1.632	1.454	.406	1.575	1.496
.150	1.631	1.444	.469	1.580	1.487
.170	1.611	1.429	.750	1.571	
.190	1.542	1.346	1.000	1.573	
			1.250	1.564	
			1.500	1.568	

[redacted]

TABLE 5. - PRESSURE COEFFICIENTS FOR AN INTERCONTINENTAL BALLISTIC MISSILE FOR NOSE II WITH FIXED TRANSITION AT M = 1.57 - Continued

(b) $\alpha = -6.3^{\circ}$

Model station, $\frac{x}{l}$	Cp for meridian angle, θ, deg –									Model station, $\frac{x}{l}$
	0	90	105	120	150	165	180	225	270	
-.002							1.540			-.002
.008							.721			.008
.018							.496			.018
.029		.358					.238	.256		.029
.039							.033			.039
.050							-.077			.050
.060		.015	-.017	-.049	-.076	-.071	-.090			.060
.075	.183	.046	.019	-.000	-.023	-.025	-.043	-.006		.075
.085	.246	.096	.100	.061	.029	.027	.008	.039	.121	.085
.096	.378									.096
.126		.123	.096	.083	.075	.076	.060	.080	.115	.126
.143							-.207			.143
.154	-.063	-.147	-.157	-.168	-.176	-.171	-.165	-.176		.154
.171							-.142			.171
.189							-.110			.189
.206	-.024	-.114	-.118	-.127	-.098	-.087	-.085	-.105		.206
.223							-.062			.223
.241							-.052			.241
.258	-.015	-.088	-.088	-.078	-.053	-.041	-.041	-.058	-.087	.258
.275							-.033			.275
.293							-.026			.293
.310	-.009	-.069	-.068	-.054	-.031	-.019	-.016	-.034	-.072	.310
.327							-.007			.327
.344							-.009			.344
.362	-.009	-.061	-.049	-.032	-.022	-.013	-.008	-.021	-.058	.362
.379							-.008			.379
.396	-.007	-.052	-.047	-.040	-.017	-.010	.000	-.023	-.050	.396
.408							.022			.408
.426	.202	.137	.142	.138	.128	.147	.166	.131	.142	.426
.451	.188	.121	.115	.113	.115	.122	.136		.117	.451
.476	.180	.103	.092	.091	.094	.099	.111	.100	.104	.476
.501	.169	.090	.081	.074	.065	.081	.101	.073	.090	.501
.530	-.030	-.094	-.103	-.105	-.081	-.088	-.104	-.077	-.096	.530
.548							-.080			.548
.566							-.057			.566
.584	-.002	-.074	-.070	-.067	-.064	-.063	-.051	-.062	-.075	.584
.602							-.043			.602
.620							-.035			.620
.638	.009	-.060		-.053	-.040				-.059	.638
.655							-.017			.655
.673							-.019			.673
.691	.003	-.065	-.058	-.045	-.031	-.031	-.010	-.023	-.051	.691
.709							-.015			.709
.727							-.012			.727
.745	.007	-.056		-.037	-.022		-.008		-.043	.745
.763							-.005			.763
.781							-.014			.781
.799							-.004			.799
.817	.018	-.046	-.036	-.023	-.015	-.009	.004	-.012	-.031	.817
.834							-.000			.834
.852							.003			.852
.870							.009			.870
.888							.010			.888
.906							.009			.906
.921	-.158									.921
.924	.009	-.025		-.017	-.004		.014		-.035	.924
.947							.049			.947
.964							.063			.964
.981	.032	-.016	-.002		.027	.032	.040	.018	-.016	.981
1.000	-.166									1.000

Nose rake			Base rake		
Orifice station, y, in.	Cp top	Cp side	Orifice station, y, in.	Cp top	Cp side
.010	1.049	1.104	.031	.799	.522
.030	1.406	1.500	.094	1.316	.941
.050	1.549	1.568	.156	1.601	1.291
.070	1.597	1.504	.219	1.581	1.526
.090	1.615	1.451	.281	1.565	1.559
.110	1.630	1.456	.344	1.560	1.520
.130	1.622	1.457	.406	1.563	1.520
.150	1.612	1.452	.469	1.569	1.525
.170	1.593	1.441	.750	1.564	
.190	1.513	1.348	1.000	1.562	
			1.250	1.562	
			1.500	1.554	

[redacted]

TABLE 5. - PRESSURE COEFFICIENTS FOR AN INTERCONTINENTAL BALLISTIC MISSILE FOR NOSE II WITH FIXED TRANSITION AT M = 1.57 - Continued

(c) $\alpha = -3.0^{\circ}$

Model station, $\frac{x}{l}$	Cp for meridian angle, θ, deg –									Model station, $\frac{x}{l}$
	0	90	105	120	150	165	180	225	270	
-.002							1.559			-.002
.008							.808			.008
.018							.582			.018
.029		.372					.300	.306		.029
.039							.090			.039
.050							-.025			.050
.060		.018	.004	-.012	-.027	-.027	-.045			.060
.075	.120	.057	.043	.031	.015	.017	-.000	.021		.075
.085	.181	.111	.129	.097	.071	.071	.048	.097	.155	.085
.096	.297									.096
.126		.137	.126	.116	.114	.115	.097	.116	.130	.126
.143							-.187			.143
.154	-.099	-.130	-.137	-.143	-.152	-.153	-.146	-.150		.154
.171							-.128			.171
.189							-.106			.189
.206	-.053	-.085	-.087	-.100	-.090	-.089	-.089	-.090		.206
.223							-.070			.223
.241							-.057			.241
.258	-.036	-.055	-.060	-.059	-.050	-.043	-.045	-.050	-.055	.258
.275							-.033			.275
.293							-.027			.293
.310	-.026	-.038	-.037	-.028	-.026	-.019	-.020	-.025	-.039	.310
.327							-.018			.327
.344							-.016			.344
.362	-.014	-.025	-.022	-.021	-.019	-.013	-.012	-.016	-.025	.362
.379							-.010			.379
.396	-.017	-.023	-.023	-.021	-.011	-.004	.003	-.014	-.020	.396
.408							.022			.408
.426	.189	.168	.169	.166	.157	.161	.160	.178	.166	.426
.451	.170	.150	.144	.138	.134	.134	.137		.145	.451
.476	.154	.126	.118	.117	.115	.114	.117	.122	.130	.476
.501	.139	.114	.109	.101	.096	.095	.099	.107	.111	.501
.530	-.053	-.074	-.079	-.084	-.080	-.081	-.079	-.072	-.076	.530
.548							-.062			.548
.566							-.046			.566
.584	-.024	-.050	-.051	-.050	-.049	-.054	-.050	-.038	-.051	.584
.602							-.042			.602
.620							-.034			.620
.638	-.016	-.029		-.033	-.028				-.029	.638
.655							-.023			.655
.673							-.021			.673
.691	-.011	-.036	-.035	-.033	-.030	-.025	-.013	-.017	-.025	.691
.709							-.012			.709
.727							-.008			.727
.745	-.003	-.028		-.021	-.013		-.010		-.018	.745
.763							-.009			.763
.781							-.013			.781
.799							-.004			.799
.817	.008	-.015	-.015	-.012	-.007	-.004	-.000	-.003	-.000	.817
.834							-.003			.834
.852							.002			.852
.870							.004			.870
.888							.007			.888
.906							.009			.906
.921	-.094									.921
.924	.017	-.000		-.008	.002		.011		-.011	.924
.947							.008			.947
.964							.012			.964
.981	.023	.011	.004		.006	.006	.007	.002	.005	.981
1.000	-.098									1.000

Nose rake			Base rake		
Orifice station, y, in.	C_p top	C_p side	Orifice station, y, in.	C_p top	C_p side
.010	.932	1.122	.031	.667	.531
.030	1.353	1.504	.094	1.013	.793
.050	1.537	1.571	.156	1.310	1.013
.070	1.593	1.512	.219	1.493	1.231
.090	1.613	1.456	.281	1.533	1.396
.110	1.622	1.461	.344	1.540	1.481
.130	1.610	1.465	.406	1.543	1.515
.150	1.595	1.458	.469	1.548	1.529
.170	1.571	1.444	.750	1.543	
.190	1.486	1.358	1.000	1.550	
			1.250	1.553	
			1.500	1.554	

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TABLE 5. - PRESSURE COEFFICIENTS FOR AN INTERCONTINENTAL BALLISTIC

MISSILE FOR NOSE II WITH FIXED TRANSITION AT M = 1.57 - Continued

(d) $\alpha = 0^{\circ}$

Model station, $\frac{x}{l}$	Cp for meridian angle, θ, deg –									Model station, $\frac{x}{l}$
	0	90	105	120	150	165	180	225	270	
-.002							1.555			-.002
.008							.892			.008
.018							.657			.018
.029		.376					.366	.360		.029
.039							.148			.039
.050							.024			.050
.060		.021	.024	.021	.018	.020	.004			.060
.075	.061	.061	.060	.062	.057	.066	.048	.058		.075
.085	.121	.112	.151	.129	.116	.120	.096	.147	.161	.085
.096	.225									.096
.126		.141	.143	.142	.152	.157	.138	.145	.137	.126
.143							-.167			.143
.154	-.127	-.123	-.127	-.127	-.131	-.133	-.126	-.133		.154
.171							-.111			.171
.189							-.090			.189
.206	-.074	-.076	-.074	-.083	-.074	-.074	-.075	-.075		.206
.223							-.059			.223
.241							-.053			.241
.258	-.051	-.042	-.044	-.044	-.047	-.046	-.050	-.043	-.041	.258
.275							-.043			.275
.293							-.036			.293
.310	-.025	-.031	-.031	-.025	-.026	-.021	-.021	-.026	-.032	.310
.327							-.017			.327
.344							-.018			.344
.362	-.017	-.015	-.010	-.009	-.019	-.016	-.015	-.014	-.013	.362
.379							-.017			.379
.396	-.017	-.010	-.014	-.016	-.014	-.013	-.006	-.014	-.010	.396
.408							-.012			.408
.426	.177	.176	.179	.177	.176	.180	.177	.175	.174	.426
.451	.154	.157	.152	.158	.154	.149	.152		.154	.451
.476	.135	.136	.134	.132	.131	.130	.131	.133	.141	.476
.501	.117	.119	.121	.117	.119	.115	.117	.119	.123	.501
.530	-.067	-.066	-.067	-.071	-.069	-.071	-.069	-.068	-.068	.530
.548							-.055			.548
.566							-.043			.566
.584	-.027	-.041	-.039	-.041	-.040	-.041	-.035	-.039	-.042	.584
.602							-.034			.602
.620							-.032			.620
.638	-.026	-.020		-.022	-.021				-.019	.638
.655							-.020			.655
.673							-.021			.673
.691	-.016	-.026	-.024	-.024	-.032	-.028	-.015	-.015	-.017	.691
.709							-.014			.709
.727							-.010			.727
.745	-.013	-.018		-.014	-.013		-.008		-.009	.745
.763							-.009			.763
.781							-.017			.781
.799							-.008			.799
.817	.004	-.006	-.007	-.006	-.007	-.003	-.001	-.001	.006	.817
.834							-.006			.834
.852							.001			.852
.870							.002			.870
.888							.006			.888
.906							.007			.906
.921	-.073									.921
.924	.013	.007		-.005	.005		.009		-.002	.924
.947							.007			.947
.964							.012			.964
.981	.033	.026	.011		.011	.009	.006	.007	.009	.981
1.000	-.076									1.000

Nose rake			Base rake		
Orifice station, y, in.	C_p top	C_p side	Orifice station, y, in.	C_p top	C_p side
.010	.829	1.141	.031	.513	.512
.030	1.296	1.504	.094	.725	.715
.050	1.524	1.569	.156	.902	.873
.070	1.585	1.503	.219	1.066	1.029
.090	1.606	1.452	.281	1.202	1.174
.110	1.611	1.460	.344	1.328	1.299
.130	1.588	1.460	.406	1.421	1.403
.150	1.570	1.452	.469	1.478	1.474
.170	1.537	1.442	.750	1.517	
.190	1.452	1.354	1.000	1.526	
			1.250	1.532	
			1.500	1.534	

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TABLE 5. - PRESSURE COEFFICIENTS FOR AN INTERCONTINENTAL BALLISTIC MISSILE FOR NOSE II WITH FIXED TRANSITION AT $M = 1.57$ - Continued

(e) $\alpha = 3.0^{\circ}$

Model station, $\frac{x}{l}$	Cp for meridian angle, θ, deg – 0	90	105	120	150	165	180	225	270	Model station, $\frac{x}{l}$
-.002							1.553			-.002
.008							.974			.008
.018							.730			.018
.029		.369					.438	.405		.029
.039							.220			.039
.050							.082			.050
.060		.021	.035	.048	.068	.074	.059			.060
.075	.012	.062	.072	.089	.104	.121	.103	.094		.075
.085	.072	.110	.164	.154	.162	.173	.150	.177	.149	.085
.096	.176									.096
.126		.136	.152	.162	.191	.202	.188	.171	.130	.126
.143							-.138			.143
.154	-.150	-.129	-.123	-.115	-.106	-.104	-.097	-.118		.154
.171							-.086			.171
.189							-.069			.189
.206	-.085	-.085	-.074	-.077	-.059	-.056	-.055	-.067		.206
.223							-.042			.223
.241							-.040			.241
.258	-.050	-.051	-.049	-.047	-.037	-.033	-.037	-.042	-.051	.258
.275							-.039			.275
.293							-.032			.293
.310	-.023	-.039	-.041	-.033	-.028	-.023	-.023	-.033	-.040	.310
.327							-.016			.327
.344							-.014			.344
.362	-.013	-.026	-.020	-.015	-.018	-.014	-.013	-.019	-.022	.362
.379							-.015			.379
.396	-.011	-.018	-.022	-.022	-.015	-.014	-.006	-.020	-.018	.396
.408							-.014			.408
.426	.164	.168	.175	.177	.181	.189	.186	.177	.166	.426
.451	.139	.150	.153	.160	.171	.167	.172		.145	.451
.476	.119	.129	.133	.138	.148	.148	.150	.144	.131	.476
.501	.099	.112	.121	.123	.136	.137	.140	.131	.115	.501
.530	-.075	-.072	-.070	-.069	-.057	-.056	-.053	-.060	-.076	.530
.548							-.040			.548
.566							-.029			.566
.584	-.041	-.048	-.042	-.040	-.031	-.030	-.024	-.034	-.050	.584
.602							-.021			.602
.620							-.022			.620
.638	-.029	-.028		-.023	-.015				-.026	.638
.655							-.012			.655
.673							-.014			.673
.691	-.016	-.035	-.029	-.026	-.030	-.023	-.010	-.017	-.024	.691
.709							-.008			.709
.727							-.009			.727
.745	-.011	-.026		-.017	-.009		-.003		-.015	.745
.763							-.008			.763
.781							-.017			.781
.799							-.006			.799
.817	.003	-.015	-.013	-.011	-.006	-.001	.002	-.003	-.002	.817
.834							-.003			.834
.852							.005			.852
.870							.006			.870
.888							.008			.888
.906							.009			.906
.921	-.084									.921
.924	.004	.001		-.009	.003		.013		-.010	.924
.947							.012			.947
.964							.016			.964
.981	.049	.016	.002		.011	.010	.010	.005	.002	.981
1.000	-.091									1.000

Nose rake			Base rake		
Orifice station, y, in.	C_p top	C_p side	Orifice station, y, in.	C_p top	C_p side
.010	.651	1.120	.031	.458	.530
.030	1.083	1.507	.094	.635	.779
.050	1.435	1.573	.156	.752	.987
.070	1.561	1.505	.219	.855	1.199
.090	1.593	1.456	.281	.944	1.364
.110	1.596	1.458	.344	1.033	1.462
.130	1.576	1.459	.406	1.112	1.512
.150	1.557	1.452	.469	1.174	1.526
.170	1.515	1.441	.750	1.391	
.190	1.427	1.352	1.000	1.487	
			1.250	1.502	
			1.500	1.514	

[redacted]

TABLE 5. - PRESSURE COEFFICIENTS FOR AN INTERCONTINENTAL BALLISTIC MISSILE FOR NOSE II WITH FIXED TRANSITION AT M = 1.57 - Continued

(f) $\alpha = 6.3^{\circ}$

Model station, $\frac{x}{l}$	Cp for meridian angle, θ, deg –									Model station, $\frac{x}{l}$
	0	90	105	120	150	165	180	225	270	
-.002							1.551			-.002
.008							1.059			.008
.018							.811			.018
.029		.360					.516	.458		.029
.039							.293			.039
.050							.144			.050
.060		.017	.044	.071	.119	.132	.123			.060
.075	-.034	.050	.078	.111	.155	.181	.165	.131		.075
.085	.026	.097	.166	.174	.214	.234	.211	.204	.110	.085
.096	.132									.096
.126		.117	.150	.177	.235	.253	.244	.194	.109	.126
.143							-.104			.143
.154	-.170	-.142	-.128	-.108	-.079	-.069	-.062	-.103		.154
.171							-.052			.171
.189							-.038			.189
.206	-.088	-.105	-.090	-.082	-.041	-.031	-.029	-.062		.206
.223							-.017			.223
.241							-.018			.241
.258	-.041	-.087	-.080	-.059	-.026	-.013	-.017	-.045	-.086	.258
.275							-.019			.275
.293							-.016			.293
.310	-.018	-.069	-.067	-.051	-.026	-.013	-.009	-.045	-.069	.310
.327							-.014			.327
.344							-.013			.344
.362	-.006	-.061	-.057	-.045	-.024	-.011	-.007	-.037	-.055	.362
.379							-.006			.379
.396	-.008	-.048	-.049	-.041	-.015	-.005	.002	-.034	-.046	.396
.408							-.007			.408
.426	.164	.141	.146	.153	.179	.198	.197	.164	.143	.426
.451	.135	.122	.129	.141	.171	.178	.185		.120	.451
.476	.112	.103	.111	.129	.168	.179	.184	.148	.106	.476
.501	.092	.093	.110	.118	.151	.158	.166	.139	.093	.501
.530	-.090	-.091	-.082	-.073	-.044	-.038	-.035	-.058	-.097	.530
.548							-.018			.548
.566							-.007			.566
.584	-.049	-.072	-.059	-.047	-.021	-.015	-.007	-.033	-.073	.584
.602							-.002			.602
.620							.007			.620
.638	-.030	-.055		-.029	-.007				-.052	.638
.655							.004			.655
.673							.000			.673
.691	-.015	-.062	-.055	-.040	-.027	-.013	.003	-.024	-.050	.691
.709							.000			.709
.727							.003			.727
.745	-.001	-.054		-.039	-.006		.004		-.041	.745
.763							.010			.763
.781							-.008			.781
.799							.000			.799
.817	.007	-.041	-.038	-.032	-.008	.004	.013	-.016	-.027	.817
.834							.004			.834
.852							.014			.852
.870							.015			.870
.888							.014			.888
.906							.021			.906
.921	-.145									.921
.924	.017	-.021		-.028	.002		.021		-.034	.924
.947							.020			.947
.964							.026			.964
.981	.016	-.012	-.021		.012	.016	.018	-.003	-.019	.981
1.000	-.159									1.000

Nose rake			Base rake		
Orifice station, y, in.	C_p top	C_p side	Orifice station, y, in.	C_p top	C_p side
.010	.533	1.123	.031	.706	.535
.030	.912	1.498	.094	1.121	.931
.050	1.326	1.570	.156	1.337	1.269
.070	1.522	1.505	.219	1.398	1.514
.090	1.571	1.451	.281	1.407	1.543
.110	1.575	1.454	.344	1.416	1.518
.130	1.551	1.456	.406	1.429	1.520
.150	1.534	1.448	.469	1.437	1.527
.170	1.485	1.438	.750	1.456	
.190	1.394	1.348	1.000	1.482	
			1.250	1.498	
			1.500	1.504	

[redacted]

TABLE 5. - PRESSURE COEFFICIENTS FOR AN INTERCONTINENTAL BALLISTIC MISSILE FOR NOSE II WITH FIXED TRANSITION AT M = 1.57 - Concluded

(g) $\alpha = 10.1^{\circ}$

Model station, $\frac{x}{l}$	Cp for meridian angle, θ, deg –									Model station, $\frac{x}{l}$
	0	90	105	120	150	165	180	225	270	
-.002							1.532			-.002
.008							1.158			.008
.018							.911			.018
.029		.330					.611	.519		.029
.039							.397			.039
.050							.224			.050
.060		.006	.048	.099	.184	.209	.207			.060
.075	-.078	.034	.084	.136	.225	.263	.248	.179		.075
.085	-.014	.077	.166	.198	.284	.318	.296	.247	.031	.085
.096	.094									.096
.126		.083	.139	.192	.295	.325	.321	.221	.072	.126
.143							-.056			.143
.154	-.180	-.170	-.138	-.101	-.041	-.019	-.007	-.083		.154
.171							-.001			.171
.189							.009			.189
.206	-.089	-.155	-.121	-.089	-.012	.010	.017	-.050		.206
.223							.026			.223
.241							.021			.241
.258	-.036	-.148	-.125	-.084	-.003	.022	.020	-.048	-.149	.258
.275							.016			.275
.293							.016			.293
.310	-.014	-.150	-.129	-.086	-.017	.009	.018	-.057	-.146	.310
.327							.017			.327
.344							.015			.344
.362	-.002	-.132	-.131	-.094	-.014	.013	.021	-.055	-.117	.362
.379							.017			.379
.396	-.003	-.109	-.118	-.096	-.015	.010	.022	-.063	-.101	.396
.408							.012			.408
.426	.236	.075	.070	.090	.177	.221	.227	.132	.090	.426
.451	.149	.069	.073	.094	.172	.200	.216		.073	.451
.476	.106	.049	.070	.096	.166	.192	.203	.135	.060	.476
.501	.092	.040	.066	.094	.164	.187	.200	.134	.046	.501
.530	-.116	-.129	-.112	-.089	-.030	-.013	-.003	-.054	-.131	.530
.548							.011			.548
.566							.023			.566
.584	-.055	-.116	-.094	-.068	-.002	.015	.027	-.033	-.115	.584
.602							.030			.602
.620							.027			.620
.638	-.037	-.102		-.060	.005				-.092	.638
.655							.035			.655
.673							.031			.673
.691	-.026	-.121	-.099	-.073	-.014	.011	.033	-.031	-.097	.691
.709							.032			.709
.727							.035			.727
.745	-.012	-.114		-.067	-.006		.026		-.086	.745
.763							.025			.763
.781							.014			.781
.799							.023			.799
.817	-.002	-.095	-.097	-.074	-.002	.022	.036	-.030	-.070	.817
.834							.032			.834
.852							.035			.852
.870							.038			.870
.888							.039			.888
.906							.038			.906
.921	-.194									.921
.924	.002	-.066		-.066	.001		.043		-.068	.924
.947							.041			.947
.964							.047			.964
.981	-.008	-.052	-.068		.014	.031	.037	-.012	-.049	.981
1.000	-.203									1.000

Nose rake			Base rake		
Orifice station, y, in.	Cp top	Cp side	Orifice station, y, in.	Cp top	Cp side
.010	.448	1.072	.031	.955	.441
.030	.778	1.474	.094	1.561	1.053
.050	1.198	1.560	.156	1.464	1.512
.070	1.462	1.479	.219	1.440	1.624
.090	1.544	1.439	.281	1.429	1.504
.110	1.552	1.441	.344	1.418	1.486
.130	1.529	1.447	.406	1.407	1.499
.150	1.507	1.438	.469	1.399	1.505
.170	1.460	1.425	.750	1.374	
.190	1.361	1.338	1.000	1.397	
			1.250	1.448	
			1.500	1.437	

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TABLE 6. - PRESSURE COEFFICIENTS FOR AN INTERCONTINENTAL BALLISTIC MISSILE FOR NOSE III WITH NATURAL TRANSITION AT $M = 1.57$

(a) $\alpha = -10.1^{\circ}$

Model station, $\frac{x}{l}$	Cp for meridian angle, θ, deg – 0	90	105	120	150	165	180	225	270	Model station, $\frac{x}{l}$
.039							1.509			.039
.040							1.360			.040
.041							1.090			.041
.044							.631			.044
.049							.049			.049
.055							.039			.055
.060	.800	.530	.483	.429	.137	.095	.128	.230		.060
.075	.137	-.074	-.116	-.151	-.153	-.153	-.153	-.153		.075
.085	.274	-.015	-.066	-.114	-.133	-.131	-.098	-.136	-.032	.085
.096	.504									.096
.126		.093	.037	.006	-.006	-.019	-.029	-.011	.078	.126
.143							-.152			.143
.154	-.008	-.177	-.203	-.215	-.213	-.206	-.152	-.153		.154
.171							-.152			.171
.189							-.122			.189
.206	.027	-.157	-.171	-.179	-.128	-.102	-.092	-.149		.206
.223							-.066			.223
.241							-.049			.241
.258	.022	-.152	-.167	-.143	-.067	-.042	-.037	-.087	-.153	.258
.275							-.024			.275
.293							-.015			.293
.310	.019	-.159	-.144	-.088	-.048	-.023	-.009	-.056	-.153	.310
.327							-.005			.327
.344							-.002			.344
.362	.015	-.140	-.103	-.063	-.051	-.020	.001	-.051	-.135	.362
.379							.002			.379
.396	.012	-.118	-.092	-.044	-.048	-.015	.013	-.031	-.114	.396
.408							.008			.408
.426	.226	.072	.092	.082	.061	.170	.243	.079	.085	.426
.451	.211	.065	.060	.074	.053	.111	.151		.064	.451
.476	.202	.047	.041	.063	.035	.098	.115	.075	.049	.476
.501	.193	.038	.035	.046	.011	.070	.082	.044	.040	.501
.530	-.004	-.131	-.137	-.109	-.100	-.130	-.108	-.087	-.133	.530
.548							-.122			.548
.566							-.064			.566
.584	.025	-.118	-.104	-.087	-.090	-.067	-.053	-.082	-.123	.584
.602							-.046			.602
.620							-.036			.620
.638	.031	-.105		-.078	-.046				-.103	.638
.655							-.024			.655
.673							-.023			.673
.691	.030	-.123	-.103	-.064	-.043	-.046	-.021	-.041	-.106	.691
.709							-.022			.709
.727							-.018			.727
.745	.026	-.113		-.048	-.033		-.018		-.101	.745
.763							-.018			.763
.781							-.028			.781
.799							-.020			.799
.817	.043	-.090	-.057	-.035	-.030	-.025	-.007	-.032	-.079	.817
.834							-.019			.834
.852							-.008			.852
.870							-.009			.870
.888							-.004			.888
.906							-.003			.906
.921	-.195									.921
.924	.049	-.065		-.025	-.020		.025		-.088	.924
.947							.038			.947
.964							.046			.964
.981	.058	-.038	.007		.004	.009	.034	.003	-.050	.981
1.000	-.202									1.000

Nose rake			Base rake		
Orifice station, y, in.	Cp top	Cp side	Orifice station, y, in.	Cp top	Cp side
.010	1.266		.031	.873	.429
.030	1.478		.094	1.568	1.020
.050	1.535		.156	1.637	1.490
.070	1.556		.219	1.569	1.615
.090	1.569		.281	1.578	1.547
.110	1.577		.344	1.568	1.485
.130	1.574		.406	1.568	1.502
.150	1.566		.469	1.575	1.494
.170	1.549		.750	1.568	
.190	1.461		1.000	1.569	
			1.250	1.562	
			1.500	1.571	

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TABLE 6. - PRESSURE COEFFICIENTS FOR AN INTERCONTINENTAL BALLISTIC MISSILE FOR NOSE III WITH NATURAL TRANSITION AT M = 1.57 - Continued

(b) $\alpha = -6.3^{\circ}$

Model station, $\frac{x}{l}$	Cp for meridian angle, θ, deg –									Model station, $\frac{x}{l}$
	0	90	105	120	150	165	180	225	270	
.039							1.539			.039
.040							1.423			.040
.041							1.178			.041
.044							.736			.044
.049							.141			.049
.055							.169			.055
.060	.730	.568	.597	.545	.241	.190	.255	.280		.060
.075	.054	-.059	-.085	-.107	-.093	-.109	-.138	-.118		.075
.085	.144	-.003	-.033	-.063	-.069	-.067	-.048	-.059	-.015	.085
.096	.270									.096
.126		.114	.083	.057	.034	.022	.014	.038	.100	.126
.143							-.170			.143
.154	-.064	-.148	-.163	-.176	-.191	-.191	-.170	-.170		.154
.171							-.160			.171
.189							-.122			.189
.206	-.022	-.114	-.122	-.133	-.105	-.094	-.091	-.115		.206
.223							-.066			.223
.241							-.054			.241
.258	-.017	-.090	-.092	-.082	-.055	-.043	-.044	-.062	-.093	.258
.275							-.033			.275
.293							-.026			.293
.310	-.011	-.071	-.070	-.056	-.031	-.018	-.017	-.037	-.075	.310
.327							-.009			.327
.344							-.008			.344
.362	-.010	-.062	-.050	-.033	-.020	-.011	-.008	-.023	-.060	.362
.379							-.008			.379
.396	-.009	-.052	-.047	-.040	-.016	-.008	.000	-.022	-.052	.396
.408							.029			.408
.426	.197	.137	.140	.137	.133	.150	.163	.131	.140	.426
.451	.184	.120	.115	.113	.116	.122	.133		.117	.451
.476	.177	.102	.092	.091	.094	.100	.109	.098	.102	.476
.501	.166	.090	.081	.074	.066	.083	.098	.069	.089	.501
.530	-.031	-.093	-.101	-.104	-.081	-.088	-.108	-.077	-.096	.530
.548							-.074			.548
.566							-.055			.566
.584	-.002	-.072	-.068	-.068	-.061	-.058	-.050	-.061	-.077	.584
.602							-.041			.602
.620							-.033			.620
.638	.006	-.059		-.052	-.038				-.059	.638
.655							-.015			.655
.673							-.019			.673
.691	.003	-.064	-.056	-.044	-.029	-.028	-.009	-.023	-.051	.691
.709							-.014			.709
.727							-.010			.727
.745	.007	-.054		-.035	-.020		-.007		-.044	.745
.763							-.003			.763
.781							-.012			.781
.799							-.003			.799
.817	.018	-.044	-.034	-.022	-.013	-.007	.005	-.013	-.030	.817
.834							.000			.834
.852							.004			.852
.870							.011			.870
.888							.011			.888
.906							.010			.906
.921	-.146									.921
.924	.012	-.022		-.014	-.000		.015		-.036	.924
.947							.078			.947
.964							.064			.964
.981	.052	-.009	.009		.035	.039	.047	.023	-.013	.981
1.000	-.155									1.000

Nose rake			Base rake		
Orifice station, y, in.	Cp top	Cp side	Orifice station, y, in.	Cp top	Cp side
.010	1.250		.031	.751	.518
.030	1.463		.094	1.288	.920
.050	1.523		.156	1.577	1.258
.070	1.537		.219	1.565	1.499
.090	1.541		.281	1.550	1.548
.110	1.543		.344	1.550	1.511
.130	1.543		.406	1.552	1.510
.150	1.534		.469	1.556	1.513
.170	1.515		.750	1.555	
.190	1.429		1.000	1.556	
			1.250	1.556	
			1.500	1.549	

[redacted]

TABLE 6. - PRESSURE COEFFICIENTS FOR AN INTERCONTINENTAL BALLISTIC MISSILE FOR NOSE III WITH NATURAL TRANSITION AT M = 1.57 - Continued

(c) $\alpha = -3.0^{\circ}$

Model station, $\frac{x}{l}$	Cp for meridian angle, θ, deg – 0	90	105	120	150	165	180	225	270	Model station, $\frac{x}{l}$
.039							1.551			.039
.040							1.468			.040
.041							1.251			.041
.044							.824			.044
.049							.232			.049
.055							.270			.055
.060	.702	.700	.671	.574	.356	.367	.389	.366		.060
.075	-.003	-.046	-.058	-.068	-.057	-.077	-.076	-.073		.075
.085	.086	.018	.006	-.006	-.019	-.014	-.023	-.011	.002	.085
.096	.239									.096
.126		.124	.106	.092	.077	.072	.066	.075	.111	.126
.143							-.178			.143
.154	-.104	-.134	-.144	-.154	-.164	-.166	-.164	-.165		.154
.171							-.141			.171
.189							-.116			.189
.206	-.055	-.088	-.091	-.103	-.096	-.095	-.096	-.097		.206
.223							-.073			.223
.241							-.059			.241
.258	-.037	-.057	-.063	-.061	-.051	-.045	-.048	-.052	-.058	.258
.275							-.035			.275
.293							-.028			.293
.310	-.028	-.038	-.037	-.029	-.026	-.021	-.021	-.026	-.041	.310
.327							-.018			.327
.344							-.016			.344
.362	-.016	-.025	-.024	-.021	-.018	-.014	-.012	-.017	-.027	.362
.379							-.010			.379
.396	-.018	-.023	-.022	-.021	-.008	-.002	.005	-.014	-.022	.396
.408							.020			.408
.426	.182	.168	.168	.166	.158	.161	.160	.162	.166	.426
.451	.168	.149	.143	.137	.135	.133	.135		.146	.451
.476	.153	.125	.118	.116	.115	.114	.116	.117	.129	.476
.501	.138	.113	.108	.100	.096	.095	.098	.100	.110	.501
.530	-.052	-.073	-.077	-.083	-.079	-.081	-.080	-.075	-.076	.530
.548							-.061			.548
.566							-.047			.566
.584	-.025	-.049	-.050	-.048	-.049	-.052	-.048	-.041	-.052	.584
.602							-.041			.602
.620							-.034			.620
.638	-.016	-.029		-.032	-.027				-.028	.638
.655							-.022			.655
.673							-.020			.673
.691	-.011	-.035	-.033	-.032	-.028	-.022	-.010	-.017	-.025	.691
.709							-.013			.709
.727							-.007			.727
.745	-.001	-.027		-.021	-.013		-.010		-.018	.745
.763							-.008			.763
.781							-.011			.781
.799							-.003			.799
.817	.008	-.015	-.014	-.011	-.006	-.002	.000	-.002	-.001	.817
.834							-.002			.834
.852							.002			.852
.870							.004			.870
.888							.008			.888
.906							.008			.906
.921	-.084									.921
.924	.017	.000		-.008	.003		.011		-.011	.924
.947							.008			.947
.964							.012			.964
.981	.041	.014	.006		.007	.009	.007	.002	.005	.981
1.000	-.091									1.000

Nose rake			Base rake		
Orifice station, y, in.	C_p top	C_p side	Orifice station, y, in.	C_p top	C_p side
.010	1.043		.031	.637	.521
.030	1.413		.094	.996	.776
.050	1.523		.156	1.281	.988
.070	1.554		.219	1.459	1.201
.090	1.565		.281	1.512	1.365
.110	1.534		.344	1.528	1.461
.130	1.525		.406	1.527	1.498
.150	1.500		.469	1.536	1.511
.170	1.469		.750	1.531	
.190	1.382		1.000	1.539	
			1.250	1.540	
			1.500	1.543	

[redacted]

TABLE 6. - PRESSURE COEFFICIENTS FOR AN INTERCONTINENTAL BALLISTIC MISSILE FOR NOSE III WITH NATURAL TRANSITION AT M = 1.57 - Continued

(d) $\alpha = 0^{\circ}$

Model station, $\frac{x}{l}$	Cp for meridian angle, θ, deg –									Model station, $\frac{x}{l}$
	0	90	105	120	150	165	180	225	270	
.039							1.558			.039
.040							1.505			.040
.041							1.317			.041
.044							.911			.044
.049							.322			.049
.055							.420			.055
.060	.563	.595	.682	.662	.656	.593	.576	.565		.060
.075	-.043	-.034	-.036	-.039	-.029	-.041	-.045	-.047		.075
.085	.029	.033	.032	.027	.026	.030	.012	.026	.021	.085
.096	.153									.096
.126		.127	.125	.121	.123	.122	.118	.111	.114	.126
.143							-.177			.143
.154	-.137	-.131	-.134	-.137	-.140	-.139	-.136	-.145		.154
.171							-.117			.171
.189							-.096			.189
.206	-.078	-.081	-.078	-.087	-.078	-.077	-.079	-.080		.206
.223							-.062			.223
.241							-.055			.241
.258	-.054	-.044	-.047	-.046	-.049	-.048	-.053	-.045	-.044	.258
.275							-.045			.275
.293							-.038			.293
.310	-.026	-.032	-.032	-.027	-.028	-.022	-.022	-.027	-.033	.310
.327							-.018			.327
.344							-.019			.344
.362	-.017	-.015	-.011	-.010	-.020	-.017	-.016	-.015	-.014	.362
.379							-.018			.379
.396	-.017	-.011	-.015	-.016	-.014	-.013	-.006	-.014	-.011	.396
.408							-.012			.408
.426	.170	.174	.177	.176	.175	.179	.175	.174	.174	.426
.451	.149	.155	.154	.156	.153	.148	.151		.152	.451
.476	.131	.134	.132	.130	.131	.129	.130	.133	.138	.476
.501	.114	.118	.120	.116	.118	.115	.117	.118	.120	.501
.530	-.066	-.065	-.067	-.072	-.068	-.070	-.068	-.067	-.069	.530
.548							-.055			.548
.566							-.042			.566
.584	-.028	-.041	-.039	-.041	-.040	-.041	-.034	-.039	-.042	.584
.602							-.034			.602
.620							-.032			.620
.638	-.026	-.020		-.022	-.021				-.018	.638
.655							-.020			.655
.673							-.021			.673
.691	-.016	-.025	-.024	-.024	-.031	-.027	-.015	-.014	-.016	.691
.709							-.014			.709
.727							-.010			.727
.745	-.013	-.018		-.014	-.013		-.008		-.008	.745
.763							-.009			.763
.781							-.017			.781
.799							-.007			.799
.817	.003	-.006	-.006	-.006	-.006	-.003	-.000	-.000	.007	.817
.834							-.006			.834
.852							.002			.852
.870							.003			.870
.888							.006			.888
.906							.008			.906
.921	-.067									.921
.924	.013	.008		-.005	.005		.010		-.001	.924
.947							.008			.947
.964							.012			.964
.981	.047	.029	.012		.011	.010	.007	.008	.010	.981
1.000	-.069									1.000

Nose rake			Base rake		
Orifice station, y, in.	C_p top	C_p side	Orifice station, y, in.	C_p top	C_p side
.010	.884		.031	.476	.501
.030	1.359		.094	.671	.690
.050	1.505		.156	.824	.844
.070	1.540		.219	.975	.996
.090	1.546		.281	1.100	1.138
.110	1.495		.344	1.229	1.266
.130	1.480		.406	1.332	1.370
.150	1.452		.469	1.409	1.441
.170	1.425		.750	1.488	
.190	1.334		1.000	1.506	
			1.250	1.517	
			1.500	1.527	

[redacted]

TABLE 6. - PRESSURE COEFFICIENTS FOR AN INTERCONTINENTAL BALLISTIC MISSILE FOR NOSE III WITH NATURAL TRANSITION AT M = 1.57 - Continued

(e) $\alpha = 3.0^{\circ}$

Model station, $\frac{x}{l}$	Cp for meridian angle, θ, deg – 0	90	105	120	150	165	180	225	270	Model station, $\frac{x}{l}$
.039							1.556			.039
.040							1.530			.040
.041							1.372			.041
.044							.992			.044
.049							.420			.049
.055							.619			.055
.060	.361	.703	.698	.677	.694	.684	.669	.674		.060
.075	-.069	-.043	-.035	-.026	.000	-.006	-.007	-.028		.075
.085	-.016	.026	.037	.044	.070	.077	.065	.050	.011	.085
.096	.082									.096
.126		.124	.136	.146	.172	.176	.174	.147	.111	.126
.143							-.145			.143
.154	-.168	-.135	-.130	-.123	-.113	-.108	-.103	-.125		.154
.171							-.089			.171
.189							-.071			.189
.206	-.092	-.088	-.076	-.081	-.061	-.056	-.057	-.070		.206
.223							-.044			.223
.241							-.041			.241
.258	-.052	-.054	-.052	-.049	-.038	-.034	-.041	-.044	-.055	.258
.275							-.042			.275
.293							-.033			.293
.310	-.023	-.041	-.043	-.035	-.030	-.024	-.024	-.035	-.043	.310
.327							-.017			.327
.344							-.017			.344
.362	-.012	-.026	-.021	-.017	-.020	-.015	-.015	-.022	-.024	.362
.379							-.017			.379
.396	-.011	-.019	-.023	-.024	-.017	-.014	-.008	-.022	-.019	.396
.408							-.016			.408
.426	.163	.167	.173	.175	.179	.188	.183	.175	.166	.426
.451	.138	.148	.151	.157	.167	.164	.168		.144	.451
.476	.118	.128	.131	.135	.146	.147	.148	.142	.131	.476
.501	.098	.111	.120	.122	.136	.136	.138	.131	.113	.501
.530	-.075	-.072	-.069	-.070	-.058	-.055	-.053	-.060	-.075	.530
.548							-.040			.548
.566							-.028			.566
.584	-.038	-.047	-.042	-.040	-.031	-.028	-.020	-.033	-.051	.584
.602							-.023			.602
.620							-.022			.620
.638	-.029	-.027		-.023	-.015				-.026	.638
.655							-.012			.655
.673							-.014			.673
.691	-.015	-.034	-.029	-.027	-.030	-.023	-.010	-.017	-.024	.691
.709							-.006			.709
.727							-.011			.727
.745	-.010	-.025		-.019	-.008		-.004		-.016	.745
.763							-.008			.763
.781							-.016			.781
.799							-.005			.799
.817	.003	-.014	-.012	-.012	-.006	-.001	.003	-.004	-.002	.817
.834							-.003			.834
.852							.006			.852
.870							.005			.870
.888							.010			.888
.906							.009			.906
.921	-.075									.921
.924	.004	.002		-.010	.003		.013		-.010	.924
.947							.012			.947
.964							.017			.964
.981	.059	.019	.003		.011	.011	.011	.005	.001	.981
1.000	-.082									1.000

Nose rake			Base rake		
Orifice station, y, in.	Cp top	Cp side	Orifice station, y, in.	Cp top	Cp side
.010	.885		.031	.425	.520
.030	1.352		.094	.580	.762
.050	1.491		.156	.681	.965
.070	1.518		.219	.762	1.172
.090	1.500		.281	.832	1.339
.110	1.454		.344	.909	1.443
.130	1.441		.406	.979	1.488
.150	1.421		.469	1.048	1.507
.170	1.394		.750	1.307	
.190	1.304		1.000	1.435	
			1.250	1.454	
			1.500	1.468	

[redacted]

TABLE 6. - PRESSURE COEFFICIENTS FOR AN INTERCONTINENTAL BALLISTIC MISSILE FOR NOSE III WITH NATURAL TRANSITION AT M = 1.57 - Continued

(f) $\alpha = 6.3^{\circ}$

Model station, $\frac{x}{l}$	Cp for meridian angle, θ, deg –									Model station, $\frac{x}{l}$
	0	90	105	120	150	165	180	225	270	
.039							1.545			.039
.040							1.549			.040
.041							1.430			.041
.044							1.091			.044
.049							.611			.049
.055							.745			.055
.060	.208	.627	.650	.651	.706	.713	.724	.664		.060
.075	-.122	-.058	-.036	-.006	.044	.047	.048	.004		.075
.085	-.039	.000	.033	.065	.120	.145	.141	.087	-.012	.085
.096	.034									.096
.126		.112	.144	.174	.229	.238	.239	.191	.099	.126
.143							-.107			.143
.154	-.194	-.146	-.132	-.111	-.081	-.070	-.062	-.105		.154
.171							-.050			.171
.189							-.037			.189
.206	-.095	-.106	-.091	-.083	-.039	-.029	-.027	-.061		.206
.223							-.017			.223
.241							-.018			.241
.258	-.043	-.089	-.081	-.058	-.025	-.013	-.019	-.046	-.092	.258
.275							-.020			.275
.293							-.017			.293
.310	-.018	-.072	-.069	-.054	-.026	-.014	-.011	-.047	-.073	.310
.327							-.015			.327
.344							-.014			.344
.362	-.006	-.062	-.058	-.047	-.024	-.011	-.006	-.040	-.058	.362
.379							-.008			.379
.396	-.007	-.048	-.050	-.042	-.016	-.007	.000	-.036	-.048	.396
.408							-.010			.408
.426	.164	.139	.144	.151	.177	.195	.193	.161	.139	.426
.451	.135	.121	.128	.140	.170	.175	.182		.119	.451
.476	.112	.102	.110	.128	.168	.177	.180	.147	.105	.476
.501	.091	.093	.108	.117	.150	.158	.163	.136	.092	.501
.530	-.094	-.091	-.081	-.073	-.043	-.038	-.035	-.058	-.098	.530
.548							-.018			.548
.566							-.007			.566
.584	-.046	-.072	-.059	-.046	-.020	-.014	-.007	-.033	-.075	.584
.602							-.002			.602
.620							.004			.620
.638	-.028	-.054		-.028	-.007				-.052	.638
.655							.004			.655
.673							-.000			.673
.691	-.013	-.061	-.055	-.040	-.027	-.012	.003	-.023	-.051	.691
.709							.000			.709
.727							.005			.727
.745	-.000	-.053		-.037	-.007		.002		-.043	.745
.763							.009			.763
.781							-.008			.781
.799							.001			.799
.817	.008	-.040	-.036	-.031	-.007	.005	.012	-.016	-.029	.817
.834							.004			.834
.852							.014			.852
.870							.016			.870
.888							.014			.888
.906							.022			.906
.921	-.133									.921
.924	.017	-.020		-.026	.003		.022		-.035	.924
.947							.021			.947
.964							.026			.964
.981	.077	-.009	-.020		.013	.018	.019	-.003	-.021	.981
1.000	-.147									1.000

Nose rake			Base rake		
Orifice station, y, in.	Cp top	Cp side	Orifice station, y, in.	Cp top	Cp side
.010	.635		.031	.678	.530
.030	1.247		.094	1.098	.918
.050	1.478		.156	1.304	1.247
.070	1.520		.219	1.367	1.496
.090	1.506		.281	1.381	1.536
.110	1.425		.344	1.391	1.508
.130	1.399		.406	1.401	1.511
.150	1.372		.469	1.414	1.514
.170	1.348		.750	1.425	
.190	1.259		1.000	1.441	
			1.250	1.451	
			1.500	1.456	

[redacted]

TABLE 6. - PRESSURE COEFFICIENTS FOR AN INTERCONTINENTAL BALLISTIC MISSILE FOR NOSE III WITH NATURAL TRANSITION AT $M = 1.57$ - Concluded

(g) $\alpha = 10.1^{\circ}$

Model station, $\frac{x}{l}$	Cp for meridian angle, θ, deg – 0	90	105	120	150	165	180	225	270	Model station, $\frac{x}{l}$
.039							1.517			.039
.040							1.557			.040
.041							1.482			.041
.044							1.198			.044
.049							.793			.049
.055							.847			.055
.060	.102	.540	.617	.666	.766	.783	.795	.702		.060
.075	-.149	-.072	-.034	.020	.108	.123	.127	.049		.075
.085	-.096	-.015	.040	.105	.202	.239	.245	.149	-.024	.085
.096	-.031									.096
.126		.091	.147	.202	.298	.319	.323	.238	.079	.126
.143							-.057			.143
.154	-.208	-.171	-.138	-.099	-.040	-.019	-.007	-.079		.154
.171							.001			.171
.189							.014			.189
.206	-.094	-.150	-.121	-.088	-.008	.015	.020	-.046		.206
.223							.026			.223
.241							.021			.241
.258	-.036	-.145	-.120	-.082	-.003	.022	.017	-.049	-.148	.258
.275							.015			.275
.293							.013			.293
.310	-.010	-.154	-.129	-.084	-.015	.010	.018	-.057	-.148	.310
.327							.010			.327
.344							.009			.344
.362	.001	-.132	-.134	-.095	-.018	.009	.018	-.059	-.126	.362
.379							.015			.379
.396	.002	-.107	-.117	-.096	-.015	.009	.022	-.067	-.107	.396
.408							.010			.408
.426	.239	.079	.072	.088	.173	.216	.221	.124	.085	.426
.451	.146	.070	.075	.094	.168	.194	.207		.071	.451
.476	.112	.052	.068	.098	.169	.193	.202	.136	.054	.476
.501	.085	.044	.068	.093	.161	.183	.195	.130	.043	.501
.530	-.110	-.125	-.110	-.087	-.030	-.014	-.007	-.056	-.133	.530
.548							.008			.548
.566							.020			.566
.584	-.051	-.113	-.092	-.066	-.005	.012	.023	-.037	-.119	.584
.602							.036			.602
.620							.025			.620
.638	-.032	-.097		-.059	.004				-.092	.638
.655							.032			.655
.673							.027			.673
.691	-.020	-.116	-.097	-.070	-.016	.010	.030	-.033	-.103	.691
.709							.031			.709
.727							.026			.727
.745	-.012	-.106		-.071	.000		.029		-.094	.745
.763							.024			.763
.781							.012			.781
.799							.023			.799
.817	-.004	-.084	-.090	-.070	-.004	.023	.035	-.032	-.074	.817
.834							.027			.834
.852							.040			.852
.870							.032			.870
.888							.035			.888
.906							.036			.906
.921	-.183									.921
.924	.002	-.059		-.062	.002		.041		-.079	.924
.947							.040			.947
.964							.047			.964
.981	.045	-.038	-.062		.014	.032	.038	-.017	-.057	.981
1.000	-.192									1.000

Nose rake			Base rake		
Orifice station, y, in.	Cp top	Cp side	Orifice station, y, in.	Cp top	Cp side
.010	.494		.031	.856	.451
.030	1.120		.094	1.459	1.030
.050	1.432		.156	1.467	1.483
.070	1.491		.219	1.411	1.613
.090	1.459		.281	1.424	1.523
.110	1.366		.344	1.416	1.490
.130	1.335		.406	1.416	1.499
.150	1.312		.469	1.420	1.506
.170	1.289		.750	1.414	
.190	1.204		1.000	1.422	
			1.250	1.429	
			1.500	1.443	

[redacted]

TABLE 7. - PRESSURE COEFFICIENTS FOR AN INTERCONTINENTAL BALLISTIC MISSILE FOR NOSE III WITH NATURAL TRANSITION AT M = 2.29

(a) $\alpha = -10.1^{\circ}$

Model station, $\frac{x}{l}$	Cp for meridian angle, θ, deg –									Model station, $\frac{x}{l}$
	0	90	105	120	150	165	180	225	270	
.039							1.638			.039
.040							1.480			.040
.041							1.202			.041
.044							.754			.044
.049							.206			.049
.055							.140			.055
.060	.791	.449	.380	.301	.201	.175	.172	.237		.060
.075	.226	.061	.024	-.007	-.049	-.063	-.070	-.036		.075
.085	.255	.067	.034	.002	-.036	-.049	-.055	-.021	.061	.085
.096	.324									.096
.126		.075	.039	.008	-.015	-.017	-.014	-.006	.072	.126
.143							-.135			.143
.154	.037	-.076	-.097	-.112	-.125		-.120	-.123	-.079	.154
.171							-.106			.171
.189							-.097			.189
.206	.041	-.084	-.101	-.113	-.097	-.086	-.083	-.106	-.084	.206
.223							-.064			.223
.241							-.053			.241
.258	.037	-.088	-.109	-.118	-.070	-.051	-.045	-.098	-.090	.258
.275							-.037			.275
.293							-.033			.293
.310	.035	-.102	-.123	-.121	-.053	-.035	-.028	-.068	-.103	.310
.327							-.024			.327
.344							-.021			.344
.362	.032	-.112	-.135	-.082	-.050	-.032	-.018	-.059	-.114	.362
.379							-.016			.379
.396	.029	-.120	-.130	-.071	-.055	-.028	-.011	-.058	-.121	.396
.408							-.011			.408
.426	.171	-.053	-.007	.005	.014	.074	.094	.010	-.054	.426
.451	.169	-.050	-.004	.014	.006	.058	.094	.018	-.053	.451
.476	.168	-.048	-.002	.016	-.003	.048	.066	.016	-.050	.476
.501	.168		.000	.015	-.012	.039	.050		-.039	.501
.530	.022	-.107	-.087	-.062	-.095		-.054	-.060	-.104	.530
.548							-.053			.548
.566							-.052			.566
.584	.027	-.091	-.072	-.058	-.090	-.051	-.044	-.063	-.090	.584
.602							-.037			.602
.620							-.033			.620
.638	.025	-.088		-.061	-.077		-.027		-.089	.638
.655							-.025			.655
.673							-.025			.673
.691	.022	-.091	-.079		-.058	-.036		-.052	-.090	.691
.709							-.025			.709
.727							-.024			.727
.745	.026	-.090		-.051	-.048		-.024		-.091	.745
.763							-.024			.763
.781							-.028			.781
.799							-.027			.799
.817	.025	-.098	-.056	-.044	-.047	-.037	-.022	-.040	-.096	.817
.834							-.025			.834
.870							-.025			.870
.888							-.027			.888
.921	-.166									.921
.924	.024	-.074		-.042			-.025			.924
.947							-.026			.947
.964							-.026			.964
.981	.059	-.060	-.038		-.042	-.040	-.026	-.038	-.066	.981
.984					-.046				-.079	.984
.998							-.029			.998
1.000	-.168									1.000

Nose rake			Base rake		
Orifice station, y, in.	Cp top	Cp side	Orifice station, y, in.	Cp top	Cp side
.010	1.273		.031	.727	.261
.030	1.537		.094	1.709	.815
.050	1.612		.156	1.716	1.308
.070	1.648		.219	1.754	1.395
.090	1.670		.281	1.750	1.440
.110	1.693		.344	1.753	1.454
.130	1.723		.406	1.750	1.471
.150	1.734		.469	1.744	1.481
.170	1.743		.750	1.751	
.190	1.668		1.000	1.750	
			1.250	1.736	
			1.500	1.720	

[redacted]

TABLE 7. - PRESSURE COEFFICIENTS FOR AN INTERCONTINENTAL BALLISTIC MISSILE FOR NOSE III WITH NATURAL TRANSITION AT M = 2.29 - Continued

(b) α = -6.3°

Model station, $\frac{x}{l}$	Cp for meridian angle, θ, deg –									Model station, $\frac{x}{l}$
	0	90	105	120	150	165	180	225	270	
.039							1.666			.039
.040							1.546			.040
.041							1.295			.041
.044							.861			.044
.049							.282			.049
.055							.221			.055
.060	.648	.442	.403	.351	.284	.265	.266	.306		.060
.075	.155	.062	.039	.016	-.009	-.020	-.026	-.005		.075
.085	.175	.071	.050	.028	.002	-.008	-.011	.011	.066	.085
.096	.237									.096
.126		.084	.062	.043	.023	.019	.018	.031	.083	.126
.143							-.118			.143
.154	-.007	-.070	-.081	-.092	-.101		-.105	-.099	-.071	.154
.171							-.094			.171
.189							-.085			.189
.206	-.003	-.066	-.073	-.080	-.078	-.076	-.075	-.079	-.066	.206
.223							-.066			.223
.241							-.057			.241
.258	.000	-.063	-.072	-.072	-.055	-.047	-.050	-.063	-.061	.258
.275							-.041			.275
.293							-.036			.293
.310	.000	-.061	-.066	-.061	-.040	-.032	-.029	-.044	-.060	.310
.327							-.026			.327
.344							-.022			.344
.362	-.002	-.064	-.063	-.053	-.029	-.021	-.019	-.035	-.061	.362
.379							-.018			.379
.396	-.004	-.064	-.061	-.048	-.025	-.017	-.012	-.033	-.060	.396
.408							-.013			.408
.426	.122	.033	.044	.056	.074	.083	.084	.067	.038	.426
.451	.122	.039	.044	.053	.068	.071	.076	.060	.042	.451
.476	.119	.042	.042	.048	.056	.059	.062	.053	.043	.476
.501	.117		.039	.042	.046	.047	.050		.041	.501
.530	-.014	-.059	-.061	-.057	-.050		-.050	-.051	-.061	.530
.548							-.046			.548
.566							-.038			.566
.584	-.005	-.054	-.055	-.051	-.044	-.039	-.035	-.045	-.053	.584
.602							-.031			.602
.620							-.028			.620
.638	-.004	-.051		-.045	-.032		-.025		-.051	.638
.655							-.023			.655
.673							-.022			.673
.691	-.003	-.053	-.050		-.028	-.026		-.030	-.051	.691
.709							-.017			.709
.727							-.016			.727
.745	-.000	-.050		-.033	-.024		-.015		-.048	.745
.763							-.015			.763
.781							-.018			.781
.799							-.015			.799
.817	-.000	-.046	-.037	-.028	-.022	-.018	-.011	-.021	-.039	.817
.834							-.012			.834
.870							-.009			.870
.888							-.009			.888
.921	-.152									.921
.924	.008	-.040		-.025			-.006			.924
.947							-.007			.947
.964							-.005			.964
.981	.026	-.036	-.027		-.018	-.013	-.007	-.017	-.031	.981
.984					-.020				-.038	.984
.998							-.010			.998
1.000	-.153									1.000

Nose rake			Base rake		
Orifice station, y, in.	Cp top	Cp side	Orifice station, y, in.	Cp top	Cp side
.010	1.180		.031	.577	.369
.030	1.471		.094	1.285	.809
.050	1.520		.156	1.467	1.104
.070	1.559		.219	1.601	1.280
.090	1.579		.281	1.599	1.411
.110	1.597		.344	1.613	1.453
.130	1.610		.406	1.626	1.468
.150	1.624		.469	1.631	1.497
.170	1.624		.750	1.646	
.190	1.548		1.000	1.659	
			1.250	1.675	
			1.500	1.675	

[redacted]

TABLE 7. - PRESSURE COEFFICIENTS FOR AN INTERCONTINENTAL BALLISTIC MISSILE FOR NOSE III WITH NATURAL TRANSITION AT M = 2.29 - Continued

(c) $\alpha = -3.0^{\circ}$

Model station, $\frac{x}{l}$	Cp for meridian angle, θ, deg –									Model station, $\frac{x}{l}$
	0	90	105	120	150	165	180	225	270	
.039							1.678			.039
.040							1.602			.040
.041							1.375			.041
.044							.950			.044
.049							.368			.049
.055							.310			.055
.060	.532	.440	.427	.397	.363	.351	.355	.372		.060
.075	.102	.063	.050	.039	.029	.020	.017	.026		.075
.085	.117	.073	.063	.052	.039	.033	.031	.043	.069	.085
.096	.173									.096
.126		.089	.078	.069	.058	.056	.055	.062	.089	.126
.143							-.098			.143
.154	-.041	-.065	-.072	-.076	-.083		-.085	-.081	-.067	.154
.171							-.077			.171
.189							-.072			.189
.206	-.029	-.054	-.058	-.060	-.064	-.064	-.065	-.062	-.053	.206
.223							-.058			.223
.241							-.053			.241
.258	-.025	-.044	-.048	-.050	-.048	-.046	-.048	-.047	-.041	.258
.275							-.044			.275
.293							-.041			.293
.310	-.020	-.040	-.042	-.039	-.036	-.035	-.034	-.037	-.036	.310
.327							-.031			.327
.344							-.028			.344
.362	-.017	-.033	-.031	-.031	-.029	-.025	-.024	-.023	-.027	.362
.379							-.023			.379
.396	-.019	-.031	-.030	-.027	-.022	-.020	-.018	-.022	-.027	.396
.408							-.019			.408
.426	.099	.078	.085	.081	.087	.087	.083	.087	.082	.426
.451	.098	.076	.075	.075	.079	.078	.078	.078	.077	.451
.476	.094	.071	.068	.069	.069	.069	.069	.071	.073	.476
.501	.091		.065	.062	.060	.057	.058		.067	.501
.530	-.029	-.041	-.044	-.045	-.045		-.039	-.044	-.040	.530
.548							-.035			.548
.566							-.031			.566
.584	-.024	-.036	-.038	-.038	-.033	-.033	-.030	-.032	-.034	.584
.602							-.028			.602
.620							-.026			.620
.638	-.019	-.033		-.027	-.026		-.024		-.031	.638
.655							-.021			.655
.673							-.019			.673
.691	-.016	-.030	-.027		-.023	-.023		-.022	-.026	.691
.709							-.019			.709
.727							-.018			.727
.745	-.013	-.021		-.022	-.020		-.017		-.019	.745
.763							-.016			.763
.781							-.017			.781
.799							-.015			.799
.817	-.010	-.021	-.021	-.020	-.017	-.014	-.011	-.014	-.014	.817
.834							-.011			.834
.870							-.008			.870
.888							-.007			.888
.921	-.132									.921
.924	-.006	-.019		-.017			-.005			.924
.947							-.006			.947
.964							-.005			.964
.981	.020	-.016	-.014		-.010	-.007	-.008	-.008	-.009	.981
.984					-.012				-.017	.984
.998							-.016			.998
1.000	-.136									1.000

Nose rake			Base rake		
Orifice station, y, in.	C_p top	C_p side	Orifice station, y, in.	C_p top	C_p side
.010	1.102		.031	.445	.347
.030	1.407		.094	.869	.600
.050	1.458		.156	1.108	.794
.070	1.480		.219	1.323	.948
.090	1.509		.281	1.476	1.090
.110	1.522		.344	1.533	1.235
.130	1.529		.406	1.567	1.342
.150	1.524		.469	1.581	1.424
.170	1.521		.750	1.584	
.190	1.444		1.000	1.578	
			1.250	1.605	
			1.500	1.615	

[redacted]

TABLE 7. - PRESSURE COEFFICIENTS FOR AN INTERCONTINENTAL BALLISTIC MISSILE FOR NOSE III WITH NATURAL TRANSITION AT $M = 2.29$ - Continued

(d) $\alpha = 0^{\circ}$

Model station, $\frac{x}{l}$	Cp for meridian angle, θ, deg –									Model station, $\frac{x}{l}$
	0	90	105	120	150	165	180	225	270	
.039							1.683			.039
.040							1.634			.040
.041							1.444			.041
.044							1.034			.044
.049							.448			.049
.055							.395			.055
.060	.432	.439	.450	.444	.445	.439	.448	.438		.060
.075	.055	.062	.061	.063	.068	.063	.062	.058		.075
.085	.071	.074	.075	.076	.078	.077	.076	.076	.071	.085
.096	.121									.096
.126		.091	.092	.092	.094	.095	.095	.092	.092	.126
.143							-.074			.143
.154	-.066	-.065	-.064	-.064	-.063		-.062	-.064	-.064	.154
.171							-.058			.171
.189							-.055			.189
.206	-.048	-.050	-.050	-.050	-.049	-.048	-.050	-.049	-.049	.206
.223							-.046			.223
.241							-.044			.241
.258	-.038	-.040	-.039	-.038	-.036	-.038	-.040	-.037	-.035	.258
.275							-.037			.275
.293							-.036			.293
.310	-.030	-.032	-.033	-.032	-.032	-.032	-.031	-.027	-.028	.310
.327							-.029			.327
.344							-.028			.344
.362	-.024	-.027	-.028	-.027	-.027	-.025	-.025	-.020	-.022	.362
.379							-.024			.379
.396	-.022	-.024	-.025	-.024	-.022	-.022	-.019	-.019	-.020	.396
.408							-.021			.408
.426	.090	.088	.095	.091	.088	.087	.085	.093	.093	.426
.451	.085	.088	.088	.087	.086	.083	.085	.086	.091	.451
.476	.080	.080	.080	.079	.080	.080	.081	.083	.083	.476
.501	.075		.075	.074	.074	.074	.075		.075	.501
.530	-.034	-.035	-.036	-.035	-.036		-.036	-.033	-.034	.530
.548							-.035			.548
.566							-.030			.566
.584	-.029	-.030	-.030	-.031	-.032	-.031	-.027	-.030	-.028	.584
.602							-.025			.602
.620							-.023			.620
.638	-.024	-.027		-.024	-.021		-.020		-.025	.638
.655							-.019			.655
.673							-.018			.673
.691	-.020	-.024	-.021		-.022	-.019		-.018	-.020	.691
.709							-.013			.709
.727							-.014			.727
.745	-.016	-.016		-.017	-.018		-.015		-.012	.745
.763							-.014			.763
.781							-.016			.781
.799							-.014			.799
.817	-.011	-.014	-.014	-.017	-.016	-.015	-.010	-.010	-.006	.817
.834							-.012			.834
.870							-.009			.870
.888							-.008			.888
.921	-.121									.921
.924	-.008	-.013		-.017			-.005			.924
.947							-.007			.947
.964							-.005			.964
.981	.010	-.010	-.010		-.009	-.008	-.008	-.004	-.003	.981
.984					-.012				-.009	.984
.998							-.012			.998
1.000	-.125									1.000

Nose rake			Base rake		
Orifice station, y, in.	C_p top	C_p side	Orifice station, y, in.	C_p top	C_p side
.010	1.008		.031	.291	.316
.030	1.334		.094	.508	.515
.050	1.387		.156	.647	.688
.070	1.405		.219	.778	.846
.090	1.421		.281	.885	.980
.110	1.438		.344	1.000	1.113
.130	1.447		.406	1.103	1.237
.150	1.445		.469	1.205	1.305
.170	1.432		.750	1.423	
.190	1.360		1.000	1.496	
			1.250	1.544	
			1.500	1.572	

[redacted]

TABLE 7. - PRESSURE COEFFICIENTS FOR AN INTERCONTINENTAL BALLISTIC MISSILE FOR NOSE III WITH NATURAL TRANSITION AT M = 2.29 - Continued

(e) $\alpha = 3.0^{\circ}$

Model station, $\frac{x}{l}$	Cp for meridian angle, θ, deg – 0	90	105	120	150	165	180	225	270	Model station, $\frac{x}{l}$
.039							1.675			.039
.040							1.651			.040
.041							1.502			.041
.044							1.107			.044
.049							.533			.049
.055							.494			.055
.060	.340	.439	.474	.492	.531	.536	.548	.508		.060
.075	.011	.061	.072	.085	.109	.106	.109	.089		.075
.085	.026	.072	.086	.099	.118	.123	.123	.108	.069	.085
.096	.071									.096
.126		.087	.100	.112	.133	.139	.141	.123	.089	.126
.143							-.049			.143
.154	-.089	-.066	-.060	-.053	-.040		-.036	-.047	-.067	.154
.171							-.033			.171
.189							-.031			.189
.206	-.063	-.055	-.050	-.042	-.031	-.030	-.029	-.038	-.054	.206
.223							-.028			.223
.241							-.027			.241
.258	-.047	-.046	-.042	-.038	-.026	-.024	-.026	-.031	-.042	.258
.275							-.025			.275
.293							-.024			.293
.310	-.033	-.039	-.036	-.031	-.024	-.022	-.020	-.025	-.038	.310
.327							-.019			.327
.344							-.020			.344
.362	-.023	-.037	-.032	-.029	-.021	-.019	-.019	-.022	-.030	.362
.379							-.019			.379
.396	-.018	-.034	-.034	-.030	-.021	-.019	-.015	-.023	-.028	.396
.408							-.016			.408
.426	.084	.075	.080	.082	.090	.099	.098	.089	.078	.426
.451	.079	.073	.075	.080	.094	.096	.100	.088	.075	.451
.476	.070	.069	.071	.077	.089	.093	.095	.086	.071	.476
.501	.064		.069	.073	.084	.086	.088		.066	.501
.530	-.037	-.042	-.041	-.039	-.035		-.030	-.036	-.041	.530
.548							-.024			.548
.566							-.019			.566
.584	-.033	-.038	-.037	-.032	-.025	-.024	-.018	-.024	-.037	.584
.602							-.016			.602
.620							-.016			.620
.638	-.027	-.032		-.023	-.018		-.013		-.028	.638
.655							-.011			.655
.673							-.010			.673
.691	-.021	-.030	-.028		-.020	-.018		-.016	-.028	.691
.709							-.014			.709
.727							-.011			.727
.745	-.016	-.023		-.024	-.017		-.010		-.022	.745
.763							-.010			.763
.781							-.015			.781
.799							-.011			.799
.817	-.010	-.024	-.024	-.022	-.015	-.011	-.006	-.013	-.017	.817
.834							-.009			.834
.870							-.005			.870
.888							-.005			.888
.921	-.128									.921
.924	-.007	-.021		-.023			-.003			.924
.947							-.001			.947
.964							-.000			.964
.981	.008	-.018	-.018		-.009	-.007	-.006	-.004	-.012	.981
.984					-.014				-.018	.984
.998							-.008			.998
1.000	-.133									1.000

Nose rake			Base rake		
Orifice station, y, in.	Cp top	Cp side	Orifice station, y, in.	Cp top	Cp side
.010	.891		.031	.230	.360
.030	1.247		.094	.372	.647
.050	1.321		.156	.464	.867
.070	1.337		.219	.560	1.029
.090	1.350		.281	.642	1.188
.110	1.361		.344	.720	1.331
.130	1.361		.406	.789	1.427
.150	1.361		.469	.852	1.466
.170	1.347		.750	1.075	
.190	1.277		1.000	1.229	
			1.250	1.290	
			1.500	1.345	

[redacted]

TABLE 7. - PRESSURE COEFFICIENTS FOR AN INTERCONTINENTAL BALLISTIC MISSILE FOR NOSE III WITH NATURAL TRANSITION AT M = 2.29 - Continued

(f) $\alpha = 6.3^{\circ}$

Model station, $\frac{x}{l}$	Cp for meridian angle, θ, deg – 0	90	105	120	150	165	180	225	270	Model station, $\frac{x}{l}$
.039							1.670			.039
.040							1.681			.040
.041							1.553			.041
.044							1.203			.044
.049							.615			.049
.055							.615			.055
.060	.252	.441	.504	.550	.633	.649	.667	.592		.060
.075	-.031	.060	.084	.110	.157	.161	.165	.127		.075
.085	-.014	.070	.096	.125	.168	.181	.184	.148	.069	.085
.096	.024									.096
.126		.082	.109	.136	.183	.197	.202	.160	.085	.126
.143							-.012			.143
.154	-.106	-.071	-.056	-.039	-.012		-.000	-.027	-.072	.154
.171							-.000			.171
.189							-.000			.189
.206	-.072	-.066	-.053	-.038	-.008	-.003	-.000	-.024	-.068	.206
.223							.004			.223
.241							.003			.241
.258	-.049	-.064	-.052	-.034	-.006	.001	.002	-.021	-.061	.258
.275							.001			.275
.293							-.000			.293
.310	-.028	-.066	-.054	-.038	-.010	-.000	.003	-.022	-.064	.310
.327							.002			.327
.344							.001			.344
.362	-.018	-.070	-.059	-.042	-.013	-.002	.001	-.024	-.065	.362
.379							.000			.379
.396	-.015	-.069	-.062	-.046	-.013	-.003	.002	-.027	-.064	.396
.408							-.000			.408
.426	.083	.027	.041	.058	.102	.121	.126	.086	.029	.426
.451	.075	.033	.040	.060	.106	.117	.124	.085	.035	.451
.476	.062	.036	.039	.057	.098	.110	.115	.082	.037	.476
.501	.053		.043	.054	.095	.110	.119		.037	.501
.530	-.046	-.064	-.061	-.052	-.021		-.006	-.034	-.064	.530
.548							-.002			.548
.566							-.000			.566
.584	-.036	-.057	-.048	-.039	-.016	-.008	-.002	-.026	-.054	.584
.602							.000			.602
.620							.000			.620
.638	-.029	-.055		-.034	-.013		-.001		-.051	.638
.655							-.001			.655
.673							-.001			.673
.691	-.023	-.055	-.050		-.018	-.008		-.022	-.054	.691
.709							-.000			.709
.727							.000			.727
.745	-.017	-.051		-.038	-.010		.002		-.051	.745
.763							.001			.763
.781							-.001			.781
.799							-.000			.799
.817	-.011	-.051	-.048	-.039	-.010	-.000	.006	-.019	-.046	.817
.834							.002			.834
.870							.010			.870
.888							.008			.888
.921	-.149									.921
.924	-.008	-.045		-.040			.007			.924
.947							.005			.947
.964							.008			.964
.981	.013	-.041	-.044		-.010	.000	.004	-.014	-.036	.981
.984					-.012				-.044	.984
.998							.003			.998
1.000	-.150									1.000

Nose rake			Base rake		
Orifice station, y, in.	Cp top	Cp side	Orifice station, y, in.	Cp top	Cp side
.010	.736		.031	.474	.363
.030	1.135		.094	.982	.848
.050	1.235		.156	1.015	1.143
.070	1.251		.219	1.061	1.315
.090	1.261		.281	1.083	1.420
.110	1.267		.344	1.098	1.449
.130	1.266		.406	1.110	1.468
.150	1.257		.469	1.124	1.480
.170	1.243		.750	1.176	
.190	1.180		1.000	1.203	
			1.250	1.220	
			1.500	1.220	

[redacted]

TABLE 7. - PRESSURE COEFFICIENTS FOR AN INTERCONTINENTAL BALLISTIC MISSILE FOR NOSE III WITH NATURAL TRANSITION AT M = 2.29 - Concluded

(g) $\alpha = 10.1^{\circ}$

Model station, $\frac{x}{l}$	Cp for meridian angle, θ, deg – 0	90	105	120	150	165	180	225	270	Model station, $\frac{x}{l}$
.039							1.652			.039
.040							1.687			.040
.041							1.616			.041
.044							1.308			.044
.049							.762			.049
.055							.796			.055
.060	.167	.451	.546	.624	.755	.785	.809	.692		.060
.075	-.072	.058	.095	.139	.217	.232	.239	.171		.075
.085	-.050	.067	.107	.158	.235	.259	.265	.201	.067	.085
.096	-.022									.096
.126		.075	.116	.162	.247	.274	.279	.207	.075	.126
.143							.031			.143
.154	-.120	-.079	-.053	-.025	.022		.046	-.001	-.080	.154
.171							.044			.171
.189							.046			.189
.206	-.078	-.084	-.057	-.029	.026	.041	.047	.000	-.084	.206
.223							.048			.223
.241							.046			.241
.258	-.040	-.093	-.066	-.034	.023	.040	.043	-.004	-.088	.258
.275							.041			.275
.293							.038			.293
.310	-.026	-.107	-.078	-.044	.014	.033	.041	-.009	-.103	.310
.327							.040			.327
.344							.039			.344
.362	-.016	-.120	-.089	-.051	.009	.030	.038	-.014	-.116	.362
.379							.035			.379
.396	-.012	-.126	-.096	-.058	.007	.027	.039	-.020	-.122	.396
.408							.033			.408
.426	.089	-.061	-.010	.038	.132	.168	.178	.097	-.058	.426
.451	.096	-.058	-.014	.037	.136	.162	.176	.094	-.057	.451
.476	.068	-.056	-.015	.037	.134	.163	.176	.095	-.054	.476
.501	.051		-.012	.037	.133	.162	.175		-.050	.501
.530	-.051	-.114	-.100	-.066	.001		.029	-.027	-.119	.530
.548							.030			.548
.566							.034			.566
.584	-.045	-.1	-.098	-.064	.001	.020	.031	-.025	-.103	.584
.602							.032			.602
.620							.028			.620
.638	-.029	-.093		-.063	.000		.029		-.095	.638
.655							.025			.655
.673							.027			.673
.691	-.027	-.098	-.105		-.005	.017		-.030	-.096	.691
.709							.032			.709
.727							.033			.727
.745	-.026	-.096		-.071	.000		.033		-.095	.745
.763							.032			.763
.781							.028			.781
.799							.025			.799
.817	-.026	-.101	-.091	-.073	-.002	.020	.031	-.030	-.097	.817
.834							.027			.834
.870							.029			.870
.888							.028			.888
.921	-.165									.921
.924	-.028	-.072		-.069			.030			.924
.947							.028			.947
.964							.031			.964
.981	-.006	-.059	-.101		-.002	.017	.026	-.022	-.069	.981
.984					-.006				-.084	.984
.998							.025			.998
1.000	-.169									1.000

Nose rake			Base rake		
Orifice station, y, in.	C_p top	C_p side	Orifice station, y, in.	C_p top	C_p side
.010	.440		.031	.532	.253
.030	.980		.094	1.189	.810
.050	1.130		.156	1.101	1.350
.070	1.154		.219	1.118	1.410
.090	1.162		.281	1.121	1.453
.110	1.163		.344	1.130	1.463
.130	1.159		.406	1.140	1.473
.150	1.162		.469	1.145	1.476
.170	1.149		.750	1.177	
.190	1.090		1.000	1.220	
			1.250	1.257	
			1.500	1.290	

[redacted]

TABLE 8. - PRESSURE COEFFICIENTS FOR AN INTERCONTINENTAL BALLISTIC MISSILE FOR NOSE III WITH NATURAL TRANSITION AT M = 2.98

(a) $\alpha = -10.1^{\circ}$

Model station, $\frac{x}{l}$	Cp for meridian angle, θ, deg – 0	90	105	120	150	165	180	225	270	Model station, $\frac{x}{l}$
.039							1.698			.039
.040							1.541			.040
.041							1.255			.041
.044							.788			.044
.049							.255			.049
.055							.175			.055
.060	.748	.417	.361	.296	.218	.197	.193	.254		.060
.075	.256	.092	.060	.029	-.002	-.012	-.017	.011		.075
.085	.262	.092	.061	.033	.001	-.008	-.010	.017	.092	.085
.096	.315									.096
.126		.079	.051	.027	.004	.000	.000	.013	.082	.126
.143							-.076			.143
.154	.061	-.035	-.051	-.063	-.074		-.070	-.072	-.035	.154
.171							-.065			.171
.189							-.061			.189
.206	.055	-.046	-.060	-.067	-.062	-.057	-.055	-.066	-.046	.206
.223							-.048			.223
.241							-.041			.241
.258	.047	-.053	-.069	-.074	-.059	-.040	-.033	-.068	-.049	.258
.275							-.027			.275
.293							-.024			.293
.310	.045	-.060	-.077	-.083	-.050	-.026	-.022	-.068	-.062	.310
.327							-.018			.327
.344							-.016			.344
.362	.041	-.068	-.083	-.085	-.030	-.020	-.014	-.058	-.069	.362
.379							-.013			.379
.396	.039	-.073	-.089	-.075	-.032	-.020	-.010	-.058	-.073	.396
.408							-.012			.408
.426	.154	-.029	-.045	-.027	.016	.036	.050	-.021	-.031	.426
.451	.158	-.024	-.051	-.006	.009	.034	.054	-.012	-.023	.451
.476	.165	-.022	-.049	-.001	.003	.026	.042	-.005	-.020	.476
.501	.169		-.047	-.001	-.002	.019	.031		-.019	.501
.530	.046	-.075	-.080	-.053	-.054		-.037	-.040	-.074	.530
.548							-.036			.548
.566							-.032			.566
.584	.045	-.077	-.073	-.057	-.058	-.042	-.033	-.045	-.076	.584
.602							-.028			.602
.620							-.027			.620
.638	.042	-.078		-.052	-.051		-.024		-.080	.638
.655							-.022			.655
.673							-.020			.673
.691	.041	-.081	-.060		-.045	-.035		-.051	-.083	.691
.709							-.019			.709
.727							-.017			.727
.745	.042	-.071		-.046	-.047		-.018		-.086	.745
.763							-.019			.763
.781							-.021			.781
.799							-.021			.799
.817	.041	-.074	-.044	-.044	-.053	-.036	-.018	-.045	-.081	.817
.834							-.020			.834
.870							-.019			.870
.888							-.019			.888
.921	-.113									.921
.924	.040	-.054		-.041			-.019			.924
.947							-.021			.947
.964							-.020			.964
.981	.066	-.044	-.037		-.054	-.047	-.020	-.044	-.045	.981
.984					-.058				-.055	.984
.998							-.021			.998
1.000	-.114									1.000

Nose rake			Base rake		
Orifice station, y, in.	Cp top	Cp side	Orifice station, y, in.	Cp top	Cp side
.010	1.237		.031	.702	.109
.030	1.554		.094	1.675	.390
.050	1.639		.156	1.888	.907
.070	1.675		.219	1.942	1.147
.090	1.716		.281	1.946	1.320
.110	1.762		.344	1.938	1.369
.130	1.795		.406	1.927	1.403
.150	1.829		.469	1.938	1.399
.170	1.847		.750	1.935	
.190	1.790		1.000	1.928	
			1.250	1.930	
			1.500	1.921	

[redacted]

TABLE 8. - PRESSURE COEFFICIENTS FOR AN INTERCONTINENTAL BALLISTIC MISSILE FOR NOSE III WITH NATURAL TRANSITION AT M = 2.98 - Continued

(b) α = -6.3°

Model station, $\frac{x}{l}$	Cp for meridian angle, θ, deg –									Model station, $\frac{x}{l}$
	0	90	105	120	150	165	180	225	270	
.039							1.736			.039
.040							1.616			.040
.041							1.357			.041
.044							.898			.044
.049							.324			.049
.055							.249			.055
.060	.614	.420	.387	.341	.288	.272	.272	.313		.060
.075	.186	.093	.071	.052	.031	.022	.017	.038		.075
.085	.191	.093	.074	.055	.032	.024	.023	.045	.095	.085
.096	.239									.096
.126		.085	.067	.051	.033	.029	.028	.042	.088	.126
.143							-.070			.143
.154	.022	-.032	-.042	-.051	-.059		-.062	-.055	-.032	.154
.171							-.058			.171
.189							-.053			.189
.206	.014	-.037	-.045	-.050	-.049	-.047	-.049	-.049	-.035	.206
.223							-.044			.223
.241							-.041			.241
.258	.013	-.041	-.047	-.048	-.042	-.039	-.038	-.043	-.035	.258
.275							-.034			.275
.293							-.032			.293
.310	.011	-.042	-.049	-.049	-.035	-.028	-.028	-.043	-.040	.310
.327							-.024			.327
.344							-.023			.344
.362	.009	-.044	-.049	-.046	-.022	-.018	-.019	-.032	-.041	.362
.379							-.016			.379
.396	.008	-.047	-.051	-.043	-.019	-.014	-.013	-.028	-.043	.396
.408							-.012			.408
.426	.103	.009	.012	.020	.046	.049	.050	.038	.013	.426
.451	.113	.016	.014	.025	.047	.049	.053	.038	.021	.451
.476	.110	.020	.018	.026	.039	.042	.045	.036	.024	.476
.501	.113		.020	.025	.034	.035	.039		.026	.501
.530	.010	-.046	-.044	-.039	-.030		-.023	-.030	-.041	.530
.548							-.022			.548
.566							-.020			.566
.584	.011	-.046	-.045	-.038	-.028	-.023	-.019	-.028	-.040	.584
.602							-.017			.602
.620							-.015			.620
.638	.010	-.045		-.032	-.023		-.014		-.039	.638
.655							-.013			.655
.673							-.012			.673
.691	.007	-.045	-.039		-.020	-.018		-.022	-.041	.691
.709							-.012			.709
.727							-.010			.727
.745	.010	-.034		-.024	-.018		-.010		-.040	.745
.763							-.009			.763
.781							-.010			.781
.799							-.009			.799
.817	.011	-.038	-.029	-.020	-.017	-.013	-.007	-.017	-.039	.817
.834							-.007			.834
.870							-.006			.870
.888							-.005			.888
.921	-.108									.921
.924	.011	-.035		-.019			-.004			.924
.947							-.005			.947
.964							-.003			.964
.981	.031	-.032	-.021		-.017	-.012	-.005	-.013	-.033	.981
.984					-.017				-.039	.984
.998							-.005			.998
1.000	-.108									1.000

Nose rake			Base rake		
Orifice station, y, in.	Cp top	Cp side	Orifice station, y, in.	Cp top	Cp side
.010	1.127		.031	.536	.274
.030	1.462		.094	1.246	.697
.050	1.521		.156	1.462	.946
.070	1.558		.219	1.663	1.160
.090	1.588		.281	1.697	1.313
.110	1.616		.344	1.719	1.373
.130	1.637		.406	1.727	1.415
.150	1.658		.469	1.739	1.441
.170	1.659		.750	1.751	
.190	1.593		1.000	1.779	
			1.250	1.789	
			1.500	1.775	

[redacted]

TABLE 8. - PRESSURE COEFFICIENTS FOR AN INTERCONTINENTAL BALLISTIC MISSILE FOR NOSE III WITH NATURAL TRANSITION AT M = 2.98 - Continued

(c) α = -3.0°

Model station, $\frac{x}{l}$	Cp for meridian angle, θ, deg – 0	90	105	120	150	165	180	225	270	Model station, $\frac{x}{l}$
.039							1.743			.039
.040							1.658			.040
.041							1.429			.041
.044							.994			.044
.049							.404			.049
.055							.320			.055
.060	.510	.419	.409	.383	.356	.347	.349	.370		.060
.075	.132	.092	.082	.071	.063	.057	.054	.065		.075
.085	.137	.094	.084	.075	.064	.059	.059	.071	.095	.085
.096	.179									.096
.126		.088	.079	.071	.062	.059	.058	.068	.092	.126
.143							-.052			.143
.154	-.006	-.030	-.035	-.039	-.044		-.047	-.042	-.030	.154
.171							-.044			.171
.189							-.042			.189
.206	-.009	-.030	-.033	-.035	-.038	-.038	-.039	-.037	-.028	.206
.223							-.037			.223
.241							-.035			.241
.258	-.010	-.028	-.031	-.032	-.032	-.032	-.033	-.031	-.023	.258
.275							-.031			.275
.293							-.028			.293
.310	-.007	-.025	-.028	-.029	-.027	-.026	-.026	-.026	-.025	.310
.327							-.024			.327
.344							-.023			.344
.362	-.006	-.024	-.025	-.025	-.023	-.021	-.021	-.024	-.022	.362
.379							-.020			.379
.396	-.007	-.022	-.023	-.022	-.018	-.017	-.019	-.019	-.020	.396
.408							-.017			.408
.426	.072	.050	.056	.053	.053	.053	.051	.055	.053	.426
.451	.078	.052	.053	.054	.057	.053	.053	.055	.055	.451
.476	.082	.053	.051	.051	.050	.050	.051	.053	.056	.476
.501	.081		.047	.048	.048	.047	.048		.057	.501
.530	-.007	-.021	-.024	-.023	-.021		-.016	-.020	-.018	.530
.548							-.016			.548
.566							-.014			.566
.584	-.006	-.023	-.022	-.021	-.018	-.017	-.014	-.017	-.019	.584
.602							-.013			.602
.620							-.013			.620
.638	-.005	-.021		-.019	-.015		-.012		-.017	.638
.655							-.012			.655
.673							-.011			.673
.691	-.005	-.018	-.018		-.015	-.013		-.015	-.016	.691
.709							-.010			.709
.727							-.010			.727
.745	-.004	-.008		-.013	-.010		-.009		-.015	.745
.763							-.009			.763
.781							-.009			.781
.799							-.007			.799
.817	-.001	-.014	-.011	-.010	-.008	-.007	-.005	-.011	-.014	.817
.834							-.005			.834
.870							-.003			.870
.888							-.002			.888
.921	-.096									.921
.924	.000	-.010		-.009			-.003			.924
.947							-.004			.947
.964							-.003			.964
.981	.013	-.008	-.008		-.005	-.004	-.005	-.005	-.010	.981
.984					-.005				-.014	.984
.998							-.010			.998
1.000	-.099									1.000

Nose rake			Base rake		
Orifice station, y, in.	C_p top	C_p side	Orifice station, y, in.	C_p top	C_p side
.010	1.000		.031	.359	.264
.030	1.345		.094	.760	.500
.050	1.417		.156	.957	.655
.070	1.443		.219	1.226	.790
.090	1.465		.281	1.422	.954
.110	1.484		.344	1.514	1.091
.130	1.501		.406	1.535	1.243
.150	1.501		.469	1.558	1.338
.170	1.496		.750	1.575	
.190	1.429		1.000	1.618	
			1.250	1.648	
			1.500	1.672	

[redacted]

TABLE 8. - PRESSURE COEFFICIENTS FOR AN INTERCONTINENTAL BALLISTIC MISSILE FOR NOSE III WITH NATURAL TRANSITION AT M = 2.98 - Continued

(d) $\alpha = 0^{\circ}$

Model station, $\frac{x}{l}$	Cp for meridian angle, θ, deg –									Model station, $\frac{x}{l}$
	0	90	105	120	150	165	180	225	270	
.039							1.754			.039
.040							1.706			.040
.041							1.495			.041
.044							1.089			.044
.049							.479			.049
.055							.408			.055
.060	.422	.419	.428	.423	.425	.422	.428	.427		.060
.075	.089	.091	.091	.092	.096	.094	.093	.093		.075
.085	.094	.093	.094	.095	.097	.096	.097	.099	.096	.085
.096	.131									.096
.126		.089	.089	.090	.091	.092	.092	.093	.093	.126
.143							-.034			.143
.154	-.030	-.031	-.029	-.028	-.028		-.028	-.028	-.028	.154
.171							-.028			.171
.189							-.028			.189
.206	-.027	-.028	-.028	-.028	-.027	-.028	-.027	-.025	-.026	.206
.223							-.026			.223
.241							-.026			.241
.258	-.026	-.025	-.025	-.025	-.025	-.024	-.025	-.022	-.019	.258
.275							-.024			.275
.293							-.023			.293
.310	-.021	-.022	-.022	-.022	-.023	-.023	-.023	-.020	-.020	.310
.327							-.021			.327
.344							-.020			.344
.362	-.017	-.018	-.019	-.018	-.019	-.019	-.019	-.016	-.016	.362
.379							-.018			.379
.396	-.016	-.004	-.007	-.011	-.016	-.017	-.014	-.012	-.003	.396
.408							-.014			.408
.426	.057	.021	.031	.036	.059	.056	.056	.052	.022	.426
.451	.062	.059	.063	.060	.062	.060	.062	.060	.064	.451
.476	.060	.063	.061	.060	.060	.060	.062	.063	.067	.476
.501	.060		.060	.058	.058	.057	.061		.065	.501
.530	-.013	-.016	-.017	-.016	-.016		-.013	-.012	-.012	.530
.548							-.013			.548
.566							-.012			.566
.584	-.014	-.016	-.015	-.016	-.015	-.016	-.013	-.011	-.012	.584
.602							-.012			.602
.620							-.013			.620
.638	-.013	-.016		-.014	-.015		-.012		-.011	.638
.655							-.011			.655
.673							-.011			.673
.691	-.012	-.014	-.013		-.015	-.013		-.011	-.011	.691
.709							-.010			.709
.727							-.009			.727
.745	-.010	-.003		-.010	-.011		-.008		-.010	.745
.763							-.007			.763
.781							-.008			.781
.799							-.008			.799
.817	-.008	-.007	-.007	-.006	-.007	-.007	-.005	-.007	-.007	.817
.834							-.006			.834
.870							-.006			.870
.888							-.006			.888
.921	-.088									.921
.924	-.004	-.004		-.008			-.003			.924
.947							-.004			.947
.964							-.001			.964
.981	.006	-.004	-.005		-.003	-.002	-.003	-.003	-.003	.981
.984					-.006				-.007	.984
.998							-.006			.998
1.000	-.091									1.000

Nose rake			Base rake		
Orifice station, y, in.	Cp top	Cp side	Orifice station, y, in.	Cp top	Cp side
.010	.883		.031	.235	.236
.030	1.271		.094	.416	.401
.050	1.339		.156	.525	.538
.070	1.352		.219	.607	.649
.090	1.370		.281	.701	.764
.110	1.388		.344	.803	.885
.130	1.385		.406	.916	1.021
.150	1.385		.469	1.011	1.107
.170	1.377		.750	1.332	
.190	1.307		1.000	1.451	
			1.250	1.548	
			1.500	1.596	

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TABLE 8. - PRESSURE COEFFICIENTS FOR AN INTERCONTINENTAL BALLISTIC MISSILE FOR NOSE III WITH NATURAL TRANSITION AT M = 2.98 - Continued

(e) $\alpha = 3.0^{\circ}$

Model station, $\frac{x}{l}$	Cp for meridian angle, θ, deg –									Model station, $\frac{x}{l}$
	0	90	105	120	150	165	180	225	270	
.039							1.757			.039
.040							1.725			.040
.041							1.563			.041
.044							1.167			.044
.049							.570			.049
.055							.493			.055
.060	.344	.418	.447	.463	.499	.505	.515	.486		.060
.075	.051	.091	.101	.112	.134	.135	.136	.123		.075
.085	.055	.093	.104	.116	.133	.137	.139	.129	.096	.085
.096	.089									.096
.126		.088	.097	.109	.126	.131	.133	.121	.092	.126
.143							-.011			.143
.154	-.048	-.030	-.025	-.019	-.010		-.005	-.014	-.029	.154
.171							-.006			.171
.189							-.007			.189
.206	-.039	-.029	-.025	-.020	-.012	-.010	-.008	-.016	-.029	.206
.223							-.008			.223
.241							-.009			.241
.258	-.033	-.028	-.025	-.021	-.012	-.011	-.009	-.016	-.024	.258
.275							-.010			.275
.293							-.012			.293
.310	-.026	-.027	-.024	-.021	-.012	-.009	-.010	-.013	-.026	.310
.327							-.009			.327
.344							-.008			.344
.362	-.020	-.026	-.022	-.017	-.013	-.008	-.007	-.013	-.024	.362
.379							-.007			.379
.396	-.017	-.023	-.021	-.018	-.013	-.009	-.006	-.013	-.023	.396
.408							-.008			.408
.426	.049	.048	.059	.055	.065	.070	.070	.062	.050	.426
.451	.054	.052	.055	.060	.074	.075	.078	.068	.054	.451
.476	.051	.050	.054	.061	.074	.079	.081	.072	.057	.476
.501	.049		.054	.060	.074	.079	.081		.055	.501
.530	-.017	-.022	-.020	-.017	-.010		-.005	-.011	-.019	.530
.548							-.007			.548
.566							-.006			.566
.584	-.015	-.024	-.020	-.019	-.014	-.009	-.007	-.012	-.019	.584
.602							-.005			.602
.620							-.005			.620
.638	-.013	-.020		-.015	-.010		-.004		-.017	.638
.655							-.004			.655
.673							-.004			.673
.691	-.012	-.019	-.017		-.011	-.007		-.010	-.017	.691
.709							-.004			.709
.727							-.004			.727
.745	-.010	-.011		-.013	-.009		-.003		-.016	.745
.763							-.004			.763
.781							-.006			.781
.799							-.008			.799
.817	-.007	-.014	-.013	-.012	-.009	-.006	-.004	-.010	-.014	.817
.834							-.004			.834
.870							-.000			.870
.888							-.001			.888
.921	-.093									.921
.924	-.005	-.014		-.011			.000			.924
.947							.000			.947
.964							.001			.964
.981	.006	-.010	-.011		-.002	.000	-.000	-.005	-.010	.981
.984					-.005				-.015	.984
.998							-.002			.998
1.000	-.095									1.000

Nose rake			Base rake		
Orifice station, y, in.	Cp top	Cp side	Orifice station, y, in.	Cp top	Cp side
.010	.732		.031	.184	.270
.030	1.156		.094	.303	.522
.050	1.243		.156	.387	.687
.070	1.258		.219	.450	.842
.090	1.272		.281	.493	.994
.110	1.276		.344	.534	1.163
.130	1.276		.406	.582	1.296
.150	1.268		.469	.631	1.384
.170	1.254		.750	.810	
.190	1.193		1.000	.983	
			1.250	1.087	
			1.500	1.170	

[redacted]

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TABLE 8. - PRESSURE COEFFICIENTS FOR AN INTERCONTINENTAL BALLISTIC MISSILE FOR NOSE III WITH NATURAL TRANSITION AT M = 2.98 - Continued

(f) $\alpha = 6.3^{\circ}$

Model station, $\frac{x}{l}$	Cp for meridian angle, θ, deg –									Model station, $\frac{x}{l}$
	0	90	105	120	150	165	180	225	270	
.039							1.740			.039
.040							1.744			.040
.041							1.624			.041
.044							1.247			.044
.049							.650			.049
.055							.596			.055
.060	.267	.418	.471	.511	.589	.605	.620	.559		.060
.075	.015	.091	.112	.136	.180	.186	.191	.158		.075
.085	.021	.092	.114	.140	.178	.189	.194	.165	.095	.085
.096	.050									.096
.126		.084	.106	.128	.169	.181	.186	.153	.089	.126
.143							.019			.143
.154	-.061	-.031	-.020	-.006	.015		.023	.004	-.032	.154
.171							.020			.171
.189							.016			.189
.206	-.046	-.035	-.026	-.013	.007	.012	.014	-.003	-.036	.206
.223							.016			.223
.241							.016			.241
.258	-.036	-.040	-.030	-.017	.007	.013	.015	-.003	-.035	.258
.275							.014			.275
.293							.013			.293
.310	-.026	-.042	-.032	-.019	.003	.010	.013	-.005	-.042	.310
.327							.012			.327
.344							.011			.344
.362	-.015	-.044	-.036	-.021	.000	.008	.011	-.008	-.043	.362
.379							.010			.379
.396	-.012	-.047	-.038	-.024	-.000	.007	.011	-.011	-.046	.396
.408							.010			.408
.426	.049	.009	.032	.043	.084	.098	.103	.068	.011	.426
.451	.053	.015	.031	.053	.097	.107	.113	.077	.017	.451
.476	.045	.017	.032	.053	.095	.107	.113	.080	.021	.476
.501	.041		.032	.052	.096	.107	.114		.022	.501
.530	-.022	-.045	-.038	-.027	-.000		.011	-.009	-.044	.530
.548							.012			.548
.566							.013			.566
.584	-.018	-.044	-.037	-.026	-.000	.006	.012	-.009	-.041	.584
.602							.012			.602
.620							.010			.620
.638	-.015	-.042		-.025	-.001		.011		-.040	.638
.655							.012			.655
.673							.011			.673
.691	-.013	-.043	-.037		-.004	.004		-.010	-.042	.691
.709							.008			.709
.727							.006			.727
.745	-.011	-.032		-.027	-.004		.007		-.042	.745
.763							.010			.763
.781							.008			.781
.799							.009			.799
.817	-.009	-.039	-.036	-.025	.001	.010	.013	-.012	-.041	.817
.834							.011			.834
.870							.013			.870
.888							.011			.888
.921	-.103									.921
.924	-.007	-.035		-.026			.012			.924
.947							.010			.947
.964							.012			.964
.981	.007	-.032	-.034		.000	.009	.011	-.012	-.035	.981
.984					-.003				-.039	.984
.998							.011			.998
1.000	-.105									1.000

Nose rake			Base rake		
Orifice station, y, in.	C_p top	C_p side	Orifice station, y, in.	C_p top	C_p side
.010	.528		.031	.362	.264
.030	1.031		.094	.768	.704
.050	1.152		.156	.784	.940
.070	1.151		.219	.831	1.169
.090	1.162		.281	.843	1.303
.110	1.159		.344	.855	1.364
.130	1.158		.406	.862	1.389
.150	1.154		.469	.871	1.429
.170	1.135		.750	.902	
.190	1.077		1.000	.938	
			1.250	.971	
			1.500	.993	

[redacted]

TABLE 8. - PRESSURE COEFFICIENTS FOR AN INTERCONTINENTAL BALLISTIC MISSILE FOR NOSE III WITH NATURAL TRANSITION AT M = 2.98 - Concluded

(g) $\alpha = 10.1^{\circ}$

Model station, $\frac{x}{l}$	Cp for meridian angle, θ, deg – 0	90	105	120	150	165	180	225	270	Model station, $\frac{x}{l}$
.039							1.710			.039
.040							1.758			.040
.041							1.674			.041
.044							1.352			.044
.049							.781			.049
.055							.737			.055
.060	.191	.421	.501	.573	.708	.739	.760	.653		.060
.075	-.018	.092	.127	.167	.241	.257	.265	.204		.075
.085	-.011	.092	.128	.172	.241	.262	.269	.213	.096	.085
.096	.012									.096
.126		.081	.116	.157	.233	.253	.263	.199	.084	.126
.143							.062			.143
.154	-.073	-.037	-.017	.006	.046		.064	.028	-.035	.154
.171							.058			.171
.189							.058			.189
.206	-.054	-.048	-.029	-.004	.040	.052	.058	.020	-.046	.206
.223							.058			.223
.241							.055			.241
.258	-.033	-.055	-.035	-.010	.035	.048	.052	.014	-.049	.258
.275							.051			.275
.293							.048			.293
.310	-.021	-.063	-.042	-.017	.028	.043	.049	.009	-.062	.310
.327							.048			.327
.344							.046			.344
.362	-.016	-.071	-.050	-.022	.024	.040	.046	.006	-.068	.362
.379							.045			.379
.396	-.014	-.075	-.055	-.027	.023	.039	.047	.003	-.073	.396
.408							.045			.408
.426	.044	-.034	.009	.044	.123	.153	.162	.095	-.030	.426
.451	.051	-.028	.007	.049	.132	.156	.167	.099	-.022	.451
.476	.042	-.027	.008	.051	.134	.160	.171	.105	-.020	.476
.501	.034		.011	.052	.135	.160	.173		-.018	.501
.530	-.033	-.076	-.054	-.027	.025		.049	.006	-.073	.530
.548							.047			.548
.566							.048			.566
.584	-.035	-.079	-.055	-.029	.021	.038	.046	.004	-.076	.584
.602							.047			.602
.620							.044			.620
.638	-.025	-.080		-.029	.020		.045		-.079	.638
.655							.046			.655
.673							.045			.673
.691	-.021	-.084	-.061		.017	.035		.001	-.083	.691
.709							.045			.709
.727							.045			.727
.745	-.020	-.073		-.033	.020		.045		-.085	.745
.763							.045			.763
.781							.041			.781
.799							.040			.799
.817	-.020	-.072	-.063	-.035	.019	.037	.045	-.003	-.080	.817
.834							.042			.834
.870							.044			.870
.888							.041			.888
.921	-.115									.921
.924	-.021	-.050		-.039			.039			.924
.947							.038			.947
.964							.043			.964
.981	-.004	-.044	-.070		.018	.036	.042	-.006	-.049	.981
.984					.014				-.058	.984
.998							.042			.998
1.000	-.117									1.000

Nose rake			Base rake		
Orifice station, y, in.	Cp top	Cp side	Orifice station, y, in.	Cp top	Cp side
.010	.279		.031	.500	.099
.030	.838		.094	1.065	.380
.050	1.049		.156	.951	.924
.070	1.039		.219	.944	1.162
.090	1.040		.281	.945	1.314
.110	1.035		.344	.951	1.360
.130	1.035		.406	.956	1.375
.150	1.026		.469	.963	1.386
.170	1.018		.750	.976	
.190	.962		1.000	1.021	
			1.250	1.068	
			1.500	1.097	

[redacted]

TABLE 9. - PRESSURE COEFFICIENTS FOR AN INTERCONTINENTAL BALLISTIC MISSILE FOR NOSE III WITH NATURAL TRANSITION AT M = 3.96

(a) α = -10.1°

Model station, $\frac{x}{l}$	Cp for meridian angle, θ, deg – 0	90	105	120	150	165	180	225	270	Model station, $\frac{x}{l}$
.039							1.722			.039
.040							1.563			.040
.041							1.281			.041
.044							.803			.044
.049							.271			.049
.055							.202			.055
.060	.713	.408	.356	.299	.231	.209	.206	.255		.060
.075	.270	.114	.088	.063	.032	.024	.020	.041		.075
.085	.261	.108	.083	.057	.031	.023	.021	.040	.105	.085
.096	.298									.096
.126		.083	.060	.041	.022	.017	.017	.029	.082	.126
.143							-.033			.143
.154	.072	-.006	-.019	-.027	-.034		-.033	-.033	-.008	.154
.171							-.031			.171
.189							-.029			.189
.206	.058	-.020	-.028	-.033	-.029	-.028	-.028	-.032	-.019	.206
.223							-.025			.223
.241							-.023			.241
.258	.051	-.026	-.034	-.035	-.032	-.028	-.020	-.033	-.014	.258
.275							-.017			.275
.293							-.015			.293
.310	.046	-.030	-.038	-.034	-.037	-.025	-.013	-.035	-.031	.310
.327							-.011			.327
.344							-.011			.344
.362	.044	-.034	-.041	-.036	-.036	-.013	-.010	-.038	-.035	.362
.379							-.012			.379
.396	.043	-.036	-.042	-.037	-.033	-.016	-.011	-.037	-.037	.396
.408							-.011			.408
.426	.131	-.015	-.003	-.025	-.018	.025	.026	-.023	-.016	.426
.451	.146	-.004	-.023	-.018	-.005	.009	.032	-.013	-.020	.451
.476	.154	-.002	-.021	-.016	-.014	.008	.024	-.004	-.003	.476
.501	.160		-.021	-.016	-.009	.005	.018		-.001	.501
.530	.056	-.035	-.040	-.037	-.030		-.021	-.026	-.035	.530
.548							-.024			.548
.566							-.024			.566
.584	.048	-.038	-.039	-.036	-.028	-.025	-.025	-.030	-.037	.584
.602							-.022			.602
.620							-.021			.620
.638	.046	-.039		-.032	-.025		-.023		-.039	.638
.655							-.023			.655
.673							-.022			.673
.691	.045	-.041	-.039		-.028	-.025		-.036	-.041	.691
.709							-.021			.709
.727							-.021			.727
.745	.044	-.020		-.034	-.031		-.023		-.042	.745
.763							-.022			.763
.781							-.022			.781
.799							-.022			.799
.817	.044	-.041	-.033	-.032	-.032	-.027	-.022	-.032	-.041	.817
.834							-.021			.834
.870							-.021			.870
.888							-.020			.888
.921	-.061									.921
.924	.042	-.037		-.028			-.020			.924
.947							-.022			.947
.964							-.022			.964
.981	.060	-.033	-.027		-.032	-.033	-.021	-.032	-.038	.981
.984					-.034				-.039	.984
.998							-.022			.998
1.000	-.062									1.000

Nose rake			Base rake		
Orifice station, y, in.	Cp top	Cp side	Orifice station, y, in.	Cp top	Cp side
.010	1.129		.031	.611	.025
.030	1.500		.094	1.576	.309
.050	1.612		.156	1.988	.624
.070	1.648		.219	2.131	.821
.090	1.717		.281	2.111	.935
.110	1.775		.344	2.137	1.009
.130	1.815		.406	2.162	1.058
.150	1.845		.469	2.166	1.089
.170	1.883		.750	2.157	
.190	1.840		1.000	2.175	
			1.250	2.182	
			1.500	2.171	

[redacted]

TABLE 9. - PRESSURE COEFFICIENTS FOR AN INTERCONTINENTAL BALLISTIC MISSILE FOR NOSE III WITH NATURAL TRANSITION AT M = 3.96 - Continued

(b) $\alpha = -6.3^{\circ}$

Model station, $\frac{x}{l}$	Cp for meridian angle, θ, deg –									Model station, $\frac{x}{l}$
	0	90	105	120	150	165	180	225	270	
.039							1.756			.039
.040							1.624			.040
.041							1.378			.041
.044							.906			.044
.049							.343			.049
.055							.247			.055
.060	.585	.406	.376	.335	.288	.273	.270	.307		.060
.075	.200	.113	.094	.077	.056	.049	.047	.063		.075
.085	.196	.107	.090	.074	.053	.048	.047	.061	.106	.085
.096	.232									.096
.126		.086	.071	.057	.043	.039	.037	.050	.086	.126
.143							-.028			.143
.154	.038	-.005	-.013	-.020	-.027		-.027	-.024	-.005	.154
.171							-.026			.171
.189							-.025			.189
.206	.024	-.014	-.020	-.024	-.024	-.023	-.023	-.024	-.013	.206
.223							-.022			.223
.241							-.021			.241
.258	.021	-.019	-.023	-.026	-.023	-.020	-.020	-.023	-.007	.258
.275							-.018			.275
.293							-.017			.293
.310	.016	-.023	-.027	-.024	-.023	-.020	-.016	-.022	-.023	.310
.327							-.015			.327
.344							-.014			.344
.362	.014	-.025	-.028	-.025	-.024	-.019	-.013	-.024	-.025	.362
.379							-.011			.379
.396	.014	-.027	-.029	-.025	-.025	-.016	-.005	-.025	-.027	.396
.408							.022			.408
.426	.076	.003	.022	-.005	-.002	.027	-.001	-.005	.002	.426
.451	.092	.013	.006	.001	.022	.029	.033	.012	.011	.451
.476	.095	.016	.007	.003	.018	.025	.026	.016	.016	.476
.501	.098		.008	.004	.018	.022	.022		.018	.501
.530	.021	-.025	-.030	-.028	-.015		-.012	-.019	-.023	.530
.548							-.014			.548
.566							-.014			.566
.584	.018	-.030	-.034	-.029	-.019	-.016	-.012	-.019	-.027	.584
.602							-.011			.602
.620							-.010			.620
.638	.015	-.031		-.024	-.017		-.009		-.029	.638
.655							-.009			.655
.673							-.009			.673
.691	.014	-.033	-.033		-.016	-.013		-.017	-.031	.691
.709							-.009			.709
.727							-.009			.727
.745	.013	-.014		-.022	-.016		-.008		-.032	.745
.763							-.008			.763
.781							-.009			.781
.799							-.009			.799
.817	.013	-.036	-.027	-.019	-.016	-.012	-.008	-.015	-.033	.817
.834							-.008			.834
.870							-.008			.870
.888							-.008			.888
.921	-.062									.921
.924	.014	-.033		-.017			-.008			.924
.947							-.009			.947
.964							-.008			.964
.981	.024	-.029	-.020		-.017	-.013	-.009	-.014	-.029	.981
.984					-.017				-.032	.984
.998							-.011			.998
1.000	-.063									1.000

Nose rake			Base rake		
Orifice station, y, in.	Cp top	Cp side	Orifice station, y, in.	Cp top	Cp side
.010	.985		.031	.401	.095
.030	1.385		.094	1.013	.377
.050	1.469		.156	1.293	.620
.070	1.499		.219	1.575	.786
.090	1.536		.281	1.677	.947
.110	1.568		.344	1.707	1.040
.130	1.586		.406	1.753	1.101
.150	1.608		.469	1.771	1.157
.170	1.617		.750	1.818	
.190	1.568		1.000	1.845	
			1.250	1.845	
			1.500	1.839	

[redacted]

TABLE 9. - PRESSURE COEFFICIENTS FOR AN INTERCONTINENTAL BALLISTIC MISSILE FOR NOSE III WITH NATURAL TRANSITION AT M = 3.96 - Continued

(c) $\alpha = -3.0^{\circ}$

Model station, $\frac{x}{l}$	Cp for meridian angle, θ, deg –									Model station, $\frac{x}{l}$
	0	90	105	120	150	165	180	225	270	
.039							1.782			.039
.040							1.675			.040
.041							1.452			.041
.044							1.020			.044
.049							.415			.049
.055							.321			.055
.060	.487	.407	.397	.373	.347	.337	.335	.358		.060
.075	.149	.111	.104	.094	.084	.079	.077	.086		.075
.085	.145	.107	.099	.091	.080	.076	.076	.085	.107	.085
.096	.177									.096
.126		.087	.079	.072	.064	.062	.061	.069	.089	.126
.143							-.019			.143
.154	.014	-.005	-.008	-.011	-.016		-.017	-.014	-.004	.154
.171							-.017			.171
.189							-.017			.189
.206	.006	-.009	-.012	-.014	-.017	-.017	-.017	-.016	-.008	.206
.223							-.017			.223
.241							-.017			.241
.258	.001	-.013	-.015	-.016	-.016	-.016	-.017	-.015	-.001	.258
.275							-.016			.275
.293							-.015			.293
.310	.000	-.014	-.016	-.016	-.016	-.015	-.014	-.015	-.013	.310
.327							-.014			.327
.344							-.013			.344
.362	-.000	-.015	-.015	-.014	-.013	-.013	-.012	-.012	-.012	.362
.379							-.011			.379
.396	-.000	-.010	-.009	-.008	-.009	-.008	-.007	-.006	-.008	.396
.408							-.005			.408
.426	.047	.012	.023	.000	.000	.009	.020	.003	.014	.426
.451	.057	.029	.023	.021	.030	.023	.024	.024	.032	.451
.476	.061	.033	.027	.025	.028	.027	.029	.030	.034	.476
.501	.065		.031	.028	.028	.027	.029		.036	.501
.530	.006	-.011	-.014	-.014	-.011		-.008	-.009	-.009	.530
.548							-.009			.548
.566							-.008			.566
.584	-.000	-.016	-.015	-.015	-.012	-.011	-.008	-.009	-.012	.584
.602							-.006			.602
.620							-.005			.620
.638	-.000	-.016		-.014	-.010		-.005		-.012	.638
.655							-.005			.655
.673							-.005			.673
.691	-.001	-.016	-.016		-.011	-.008		-.009	-.012	.691
.709							-.005			.709
.727							-.006			.727
.745	-.001	.0		-.012	-.010		-.005		-.011	.745
.763							-.006			.763
.781							-.006			.781
.799							-.006			.799
.817	-.001	-.015	-.014	-.010	-.008	-.007	-.006	-.007	-.010	.817
.834							-.005			.834
.870							-.004			.870
.888							-.004			.888
.921	-.061									.921
.924	-.000	-.014		-.010			-.003			.924
.947							-.005			.947
.964							-.003			.964
.981	.006	-.011	-.010		-.006	-.005	-.004	-.005	-.008	.981
.984					-.007				-.010	.984
.998							-.008			.998
1.000	-.063									1.000

Nose rake			Base rake		
Orifice station, y, in.	Cp top	Cp side	Orifice station, y, in.	Cp top	Cp side
.010	.821		.031	.242	.142
.030	1.270		.094	.551	.314
.050	1.338		.156	.728	.419
.070	1.367		.219	.973	.531
.090	1.385		.281	1.188	.654
.110	1.414		.344	1.346	.772
.130	1.432		.406	1.411	.913
.150	1.429		.469	1.443	1.034
.170	1.421		.750	1.478	
.190	1.365		1.000	1.557	
			1.250	1.619	
			1.500	1.642	

[redacted]

TABLE 9. - PRESSURE COEFFICIENTS FOR AN INTERCONTINENTAL BALLISTIC MISSILE FOR NOSE III WITH NATURAL TRANSITION AT M = 3.96 - Continued

(d) $\alpha = 0^{\circ}$

Model station, $\frac{x}{l}$	Cp for meridian angle, θ, deg –									Model station, $\frac{x}{l}$
	0	90	105	120	150	165	180	225	270	
.039							1.782			.039
.040							1.715			.040
.041							1.512			.041
.044							1.103			.044
.049							.495			.049
.055							.385			.055
.060	.411	.409	.415	.410	.410	.406	.408	.409		.060
.075	.111	.112	.112	.111	.114	.111	.112	.111		.075
.085	.108	.106	.109	.109	.110	.108	.109	.110	.108	.085
.096	.136									.096
.126		.088	.089	.088	.090	.090	.089	.090	.090	.126
.143							-.004			.143
.154	-.002	-.003	-.004	-.003	-.004		-.003	-.005	-.003	.154
.171							-.005			.171
.189							-.007			.189
.206	-.007	-.008	-.008	-.008	-.008	-.008	-.008	-.008	-.007	.206
.223							-.009			.223
.241							-.009			.241
.258	-.010	-.009	-.010	-.010	-.009	-.009	-.009	-.010	.000	.258
.275							-.009			.275
.293							-.009			.293
.310	-.010	-.011	-.012	-.010	-.011	-.010	-.010	-.010	-.010	.310
.327							-.010			.327
.344							-.009			.344
.362	-.010	-.008	-.008	-.008	-.009	-.009	-.009	-.008	-.007	.362
.379							-.009			.379
.396	-.008	.001	.002	.001	-.001	-.005	-.007	-.000	.002	.396
.408							-.006			.408
.426	.036	.004	.024	.004	.013	.029	.039	.008	.004	.426
.451	.042	.027	.029	.030	.042	.037	.038	.034	.027	.451
.476	.040	.034	.034	.035	.039	.038	.037	.040	.035	.476
.501	.042		.036	.039	.041	.040	.041		.040	.501
.530	-.002	-.007	-.007	-.005	-.005		-.005	-.004	-.004	.530
.548							-.006			.548
.566							-.005			.566
.584	-.007	-.007	-.007	-.007	-.007	-.008	-.006	-.004	-.004	.584
.602							-.005			.602
.620							-.006			.620
.638	-.008	-.009		-.006	-.009		-.007		-.005	.638
.655							-.007			.655
.673							-.007			.673
.691	-.007	-.010	-.010		-.008	-.009		-.006	-.006	.691
.709							-.006			.709
.727							-.006			.727
.745	-.006	.006		-.008	-.007		-.006		-.005	.745
.763							-.006			.763
.781							-.005			.781
.799							-.005			.799
.817	-.005	-.007	-.007	-.007	-.006	-.005	-.005	-.005	-.003	.817
.834							-.005			.834
.870							-.004			.870
.888							-.004			.888
.921	-.058									.921
.924	-.004	-.006		-.006			-.004			.924
.947							-.005			.947
.964							-.004			.964
.981	.000	-.004	-.005		-.004	-.003	-.003	-.002	-.001	.981
.984					-.005				-.003	.984
.998							-.006			.998
1.000	-.059									1.000

Nose rake			Base rake		
Orifice station, y, in.	Cp top	Cp side	Orifice station, y, in.	Cp top	Cp side
.010	.647		.031	.129	.128
.030	1.177		.094	.272	.247
.050	1.239		.156	.339	.327
.070	1.264		.219	.419	.403
.090	1.286		.281	.484	.479
.110	1.291		.344	.566	.569
.130	1.286		.406	.649	.662
.150	1.277		.469	.716	.757
.170	1.262		.750	1.027	
.190	1.210		1.000	1.215	
			1.250	1.360	
			1.500	1.461	

[redacted]

TABLE 9. - PRESSURE COEFFICIENTS FOR AN INTERCONTINENTAL BALLISTIC MISSILE FOR NOSE III WITH NATURAL TRANSITION AT M = 3.96 - Continued

(e) $\alpha = 3.0^{\circ}$

Model station, $\frac{x}{l}$	Cp for meridian angle, θ, deg –									Model station, $\frac{x}{l}$
	0	90	105	120	150	165	180	225	270	
.039							1.787			.039
.040							1.754			.040
.041							1.579			.041
.044							1.199			.044
.049							.575			.049
.055							.479			.055
.060	.339	.407	.433	.446	.477	.480	.486	.462		.060
.075	.077	.110	.121	.128	.148	.149	.150	.136		.075
.085	.076	.106	.116	.126	.141	.144	.146	.136	.107	.085
.096	.100									.096
.126		.087	.096	.104	.117	.121	.122	.111	.089	.126
.143							.010			.143
.154	-.014	-.004	-.001	.001	.009		.011	.005	-.002	.154
.171							.009			.171
.189							.006			.189
.206	-.016	-.009	-.007	-.003	.002	.002	.003	.001	-.008	.206
.223							.002			.223
.241							.000			.241
.258	-.016	-.012	-.015	-.007	-.002	-.001	-.000	-.003	-.000	.258
.275							-.000			.275
.293							-.000			.293
.310	-.014	-.014	-.011	-.008	-.004	-.001	-.000	-.004	-.012	.310
.327							-.000			.327
.344							-.001			.344
.362	-.013	-.014	-.012	-.009	-.004	-.002	-.001	-.004	-.012	.362
.379							-.001			.379
.396	-.008	-.008	-.008	-.008	-.003	-.002	-.001	-.004	-.006	.396
.408							-.001			.408
.426	.025	.009	.033	.026	.043	.047	.046	.041	.011	.426
.451	.024	.028	.033	.041	.058	.055	.059	.050	.030	.451
.476	.026	.032	.038	.043	.056	.060	.064	.053	.034	.476
.501	.029		.040	.045	.058	.062	.067		.036	.501
.530	-.007	-.010	-.008	-.005	.001		.006	.001	-.008	.530
.548							.002			.548
.566							.001			.566
.584	-.010	-.014	-.012	-.009	-.004	-.004	-.001	-.003	-.011	.584
.602							.000			.602
.620							.000			.620
.638	-.008	-.015		-.008	-.005		.001		-.011	.638
.655							.001			.655
.673							.000			.673
.691	-.008	-.015	-.013		-.005	-.003		-.004	-.011	.691
.709							-.000			.709
.727							.000			.727
.745	-.007	.001		-.010	-.005		.000		-.011	.745
.763							.000			.763
.781							-.001			.781
.799							-.000			.799
.817	-.007	-.013	-.013	-.010	-.004	-.002	.000	-.004	-.010	.817
.834							.000			.834
.870							.000			.870
.888							.001			.888
.921	-.058									.921
.924	-.005	-.012		-.010			.002			.924
.947							.000			.947
.964							.000			.964
.981	.000	-.010	-.011		-.004	-.001	.001	-.001	-.008	.981
.984					-.004				-.010	.984
.998							.000			.998
1.000	-.060									1.000

Nose rake			Base rake		
Orifice station, y, in.	C_p top	C_p side	Orifice station, y, in.	C_p top	C_p side
.010	.466		.031	.088	.153
.030	1.052		.094	.158	.325
.050	1.168		.156	.204	.439
.070	1.161		.219	.238	.575
.090	1.157		.281	.283	.701
.110	1.166		.344	.310	.842
.130	1.159		.406	.339	.987
.150	1.150		.469	.370	1.101
.170	1.134		.750	.520	
.190	1.089		1.000	.652	
			1.250	.788	
			1.500	.879	

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TABLE 9. - PRESSURE COEFFICIENTS FOR AN INTERCONTINENTAL BALLISTIC MISSILE FOR NOSE III WITH NATURAL TRANSITION AT M = 3.96 - Continued

(f) $\alpha = 6.3^{\circ}$

Model station, $\frac{x}{l}$	Cp for meridian angle, θ, deg –									Model station, $\frac{x}{l}$
	0	90	105	120	150	165	180	225	270	
.039							1.774			.039
.040							1.789			.040
.041							1.662			.041
.044							1.284			.044
.049							.645			.049
.055							.573			.055
.060	.272	.407	.454	.493	.563	.578	.588	.531		.060
.075	.048	.113	.135	.155	.194	.202	.203	.173		.075
.085	.046	.109	.129	.151	.187	.195	.200	.171	.109	.085
.096	.069									.096
.126		.087	.104	.121	.157	.165	.169	.140	.089	.126
.143							.039			.143
.154	-.024	-.005	.003	.013	.030		.039	.022	-.006	.154
.171							.031			.171
.189							.026			.189
.206	-.021	-.012	-.006	.002	.016	.021	.024	.009	-.012	.206
.223							.023			.223
.241							.022			.241
.258	-.018	-.018	-.012	-.003	.013	.019	.022	.005	-.007	.258
.275							.021			.275
.293							.019			.293
.310	-.016	-.021	-.015	-.005	.010	.016	.018	.002	-.021	.310
.327							.018			.327
.344							.016			.344
.362	-.013	-.024	-.017	-.008	.008	.014	.016	.000	-.025	.362
.379							.015			.379
.396	-.010	-.025	-.019	-.010	.007	.013	.016	.000	-.026	.396
.408							.015			.408
.426	.022	.004	.034	.034	.065	.075	.078	.052	.003	.426
.451	.031	.013	.027	.044	.085	.090	.094	.065	.014	.451
.476	.024	.017	.031	.047	.081	.091	.096	.069	.018	.476
.501	.023		.031	.046	.082	.093	.099		.020	.501
.530	-.010	-.023	-.015	-.007	.011		.020	.004	-.021	.530
.548							.018			.548
.566							.019			.566
.584	-.012	-.027	-.019	-.010	.008	.014	.017	.001	-.025	.584
.602							.017			.602
.620							.016			.620
.638	-.010	-.028		-.010	.006		.016		-.027	.638
.655							.016			.655
.673							.016			.673
.691	-.009	-.030	-.023		.005	.012		-.001	-.028	.691
.709							.016			.709
.727							.016			.727
.745	-.009	-.011		-.013	.005		.016		-.028	.745
.763							.016			.763
.781							.014			.781
.799							.014			.799
.817	-.009	-.030	-.023	-.015	.005	.013	.016	-.001	-.029	.817
.834							.016			.834
.870							.015			.870
.888							.016			.888
.921	-.060									.921
.924	-.008	-.030		-.017			.014			.924
.947							.013			.947
.964							.013			.964
.981	-.003	-.026	-.028		.003	.012	.014	-.003	-.028	.981
.984					.003				-.029	.984
.998							.015			.998
1.000	-.061									1.000

Nose rake			Base rake		
Orifice station, y, in.	Cp top	Cp side	Orifice station, y, in.	Cp top	Cp side
.010	.276		.031	.180	.099
.030	.906		.094	.381	.403
.050	1.067		.156	.437	.665
.070	1.045		.219	.486	.790
.090	1.056		.281	.500	.929
.110	1.047		.344	.526	1.018
.130	1.036		.406	.540	1.092
.150	1.027		.469	.549	1.136
.170	1.007		.750	.595	
.190	.949		1.000	.640	
			1.250	.681	
			1.500	.710	

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TABLE 9. - PRESSURE COEFFICIENTS FOR AN INTERCONTINENTAL BALLISTIC MISSILE FOR NOSE III WITH NATURAL TRANSITION AT M = 3.96 - Concluded

(g) $\alpha = 10.1^{\circ}$

Model station, $\frac{x}{l}$	Cp for meridian angle, θ, deg – 0	90	105	120	150	165	180	225	270	Model station, $\frac{x}{l}$
.039							1.730			.039
.040							1.791			.040
.041							1.710			.041
.044							1.395			.044
.049							.790			.049
.055							.703			.055
.060	.203	.405	.477	.544	.669	.696	.715	.611		.060
.075	.019	.112	.146	.181	.251	.267	.275	.216		.075
.085	.020	.107	.139	.178	.240	.257	.264	.214	.109	.085
.096	.037									.096
.126		.082	.112	.148	.215	.234	.241	.184	.084	.126
.143							.076			.143
.154	-.033	-.006	.008	.026	.058		.074	.044	-.006	.154
.171							.064			.171
.189							.061			.189
.206	-.026	-.018	-.006	.011	.045	.056	.060	.030	-.018	.206
.223							.059			.223
.241							.056			.241
.258	-.020	-.026	-.012	.004	.038	.050	.054	.024	-.013	.258
.275							.052			.275
.293							.050			.293
.310	-.014	-.030	-.017	-.000	.033	.043	.049	.019	-.032	.310
.327							.048			.327
.344							.048			.344
.362	-.011	-.035	-.022	-.003	.029	.042	.047	.017	-.036	.362
.379							.046			.379
.396	-.011	-.037	-.024	-.007	.029	.041	.047	.014	-.037	.396
.408							.046			.408
.426	.018	-.013	.029	.041	.105	.128	.134	.079	-.013	.426
.451	.027	-.004	.021	.053	.123	.141	.150	.090	-.004	.451
.476	.023	-.003	.022	.057	.128	.151	.160	.099	-.001	.476
.501	.019		.025	.060	.132	.155	.165		-.000	.501
.530	-.016	-.034	-.021	-.001	.040		.058	.022	-.034	.530
.548							.054			.548
.566							.053			.566
.584	-.025	-.038	-.024	-.008	.030	.043	.050	.017	-.039	.584
.602							.050			.602
.620							.047			.620
.638	-.021	-.039		-.007	.028		.049		-.039	.638
.655							.050			.655
.673							.049			.673
.691	-.021	-.042	-.028		.026	.040		.014	-.041	.691
.709							.049			.709
.727							.048			.727
.745	-.021	-.021		-.013	.026		.048		-.042	.745
.763							.047			.763
.781							.046			.781
.799							.046			.799
.817	-.020	-.042	-.030	-.013	.026	.040	.049	.012	-.042	.817
.834							.047			.834
.870							.047			.870
.888							.047			.888
.921	-.063									.921
.924	-.020	-.039		-.015			.046			.924
.947							.044			.947
.964							.044			.964
.981	-.014	-.034	-.033		.024	.038	.043	.010	-.040	.981
.984					.024				-.041	.984
.998							.043			.998
1.000	-.063									1.000

Nose rake			Base rake		
Orifice station, y, in.	C_p top	C_p side	Orifice station, y, in.	C_p top	C_p side
.010	.124		.031	.308	.034
.030	.659		.094	.703	.352
.050	.972		.156	.641	.665
.070	.920		.219	.632	.820
.090	.932		.281	.629	.927
.110	.923		.344	.616	1.019
.130	.920		.406	.601	1.072
.150	.903		.469	.591	1.108
.170	.887		.750	.551	
.190	.831		1.000	.574	
			1.250	.654	
			1.500	.744	

[redacted]

TABLE 10. - PRESSURE COEFFICIENTS FOR AN INTERCONTINENTAL BALLISTIC MISSILE FOR NOSE III WITH NATURAL TRANSITION AT M = 4.65

(a) $\alpha = -6.3^{\circ}$

Model station, $\frac{x}{l}$	Cp for meridian angle, θ, deg –									Model station, $\frac{x}{l}$
	0	90	105	120	150	165	180	225	270	
.039							1.814			.039
.040							1.683			.040
.041							1.406			.041
.044							.932			.044
.049							.358			.049
.055							.259			.055
.060	.580	.419	.387	.347	.298	.280	.276	.303		.060
.075	.206	.128	.111	.089	.069	.061	.058	.071		.075
.085	.199	.120	.103	.086	.065	.059	.058	.069	.106	.085
.096	.230									.096
.126		.089	.077	.065	.049	.046	.043	.052	.084	.126
.143							-.011			.143
.154	.046	.005	.000	-.006	-.011		-.011	-.010	.002	.154
.171							-.011			.171
.189							-.011			.189
.206	.031	-.001	-.008	-.010	-.012	-.011	-.011	-.011	-.003	.206
.223							-.010			.223
.241							-.010			.241
.258	.027	-.008	-.012	-.014	-.012	-.010	-.009	-.012	.011	.258
.275							-.007			.275
.293							-.007			.293
.310	.024	-.011	-.016	-.013	-.013	-.012	-.008	-.012	-.013	.310
.327							-.007			.327
.344							-.007			.344
.362	.020	-.015	-.016	-.012	-.012	-.012	-.006	-.011	-.015	.362
.379							-.006			.379
.396	.019	-.014	-.013	-.012	-.010	-.010	-.006	-.010	-.015	.396
.408							-.004			.408
.426	.063	.006	.034	-.009	-.007	-.000	.014	-.006	.002	.426
.451	.080	.016	.006	-.001	.017	-.002	.019	.000	.009	.451
.476	.085	.018	.008	.001	.002	.006	.019	.006	.011	.476
.501	.095		.008	.001	.006	.010	.016		.013	.501
.530	.032	-.012	-.016	-.017	-.010		-.008	-.010	-.015	.530
.548							-.009			.548
.566							-.009			.566
.584	.024	-.017	-.019	-.017	-.012	-.010	-.008	-.013	-.019	.584
.602							-.007			.602
.620							-.006			.620
.638	.021	-.017		-.012	-.013		-.006		-.021	.638
.655							-.005			.655
.673							-.006			.673
.691	.020	-.020	-.019		-.014	-.010		-.015	-.021	.691
.709							-.006			.709
.727							-.006			.727
.745	.020	.012		-.017	-.014		-.005		-.021	.745
.763							-.007			.763
.781							-.006			.781
.799							-.007			.799
.817	.020	-.021	-.019	-.015	-.012	-.010	-.006	-.012	-.022	.817
.834							-.008			.834
.870							-.007			.870
.888							-.007			.888
.921	-.037									.921
.924	.020	-.021		-.014			-.007			.924
.947							-.009			.947
.964							-.006			.964
.981	.026	-.019	-.017		-.014	-.014	-.006	-.012	-.019	.981
.984					-.014				-.019	.984
.998							-.011			.998
1.000	-.037									1.000

Nose rake			Base rake		
Orifice station, y, in.	Cp top	Cp side	Orifice station, y, in.	Cp top	Cp side
.010	.883		.031	.353	.047
.030	1.383		.094	.869	.314
.050	1.450		.156	1.155	.507
.070	1.485		.219	1.469	.620
.090	1.528		.281	1.635	.759
.110	1.552		.344	1.708	.853
.130	1.579		.406	1.757	.932
.150	1.600		.469	1.791	.975
.170	1.602		.750	1.877	
.190	1.563		1.000	1.877	
			1.250	1.902	
			1.500	1.886	

[redacted]

TABLE 10. - PRESSURE COEFFICIENTS FOR AN INTERCONTINENTAL BALLISTIC MISSILE FOR NOSE III WITH NATURAL TRANSITION AT M = 4.65 - Continued

(b) $\alpha = -3.0^{\circ}$

Model station, $\frac{x}{l}$	Cp for meridian angle, θ, deg –									Model station, $\frac{x}{l}$
	0	90	105	120	150	165	180	225	270	
.039							1.826			.039
.040							1.727			.040
.041							1.496			.041
.044							1.042			.044
.049							.427			.049
.055							.335			.055
.060	.485	.421	.408	.384	.356	.344	.342	.353		.060
.075	.155	.127	.119	.107	.096	.091	.088	.092		.075
.085	.150	.119	.111	.103	.091	.085	.085	.090	.107	.085
.096	.178									.096
.126		.093	.086	.080	.071	.067	.066	.068	.085	.126
.143							-.005			.143
.154	.025	.007	.004	.001	-.003		-.005	-.003	.003	.154
.171							-.006			.171
.189							-.007			.189
.206	.015	.001	-.002	-.003	-.006	-.007	-.007	-.006	-.001	.206
.223							-.007			.223
.241							-.008			.241
.258	.011	-.003	-.005	-.008	-.008	-.007	-.008	-.008	.016	.258
.275							-.006			.275
.293							-.005			.293
.310	.007	-.007	-.009	-.008	-.008	-.008	-.006	-.007	-.007	.310
.327							-.005			.327
.344							-.002			.344
.362	.006	-.007	-.005	-.004	-.003	-.003	-.002	-.002	-.004	.362
.379							-.001			.379
.396	.007	-.002	-.002	-.002	-.002	-.002	-.001	-.000	-.001	.396
.408							-.000			.408
.426	.037	.009	.040	-.000	-.000	.002	.003	.000	.002	.426
.451	.050	.024	.018	.011	.021	.002	.008	.004	.017	.451
.476	.053	.027	.022	.016	.009	.010	.013	.012	.022	.476
.501	.060		.022	.016	.014	.013	.015		.024	.501
.530	.017	-.004	-.008	-.009	-.009		-.009	-.009	-.008	.530
.548							-.008			.548
.566							-.006			.566
.584	.007	-.008	-.010	-.012	-.009	-.008	-.007	-.008	-.010	.584
.602							-.007			.602
.620							-.006			.620
.638	.005	-.010		-.008	-.009		-.004		-.012	.638
.655							-.004			.655
.673							-.004			.673
.691	.005	-.011	-.012		-.009	-.006		-.007	-.011	.691
.709							-.004			.709
.727							-.003			.727
.745	.006	.019		-.011	-.008		-.004		-.011	.745
.763							-.004			.763
.781							-.005			.781
.799							-.005			.799
.817	.006	-.011	-.012	-.009	-.006	-.006	-.004	-.006	-.011	.817
.834							-.004			.834
.870							-.004			.870
.888							-.003			.888
.921	-.036									.921
.924	.006	-.012		-.009			-.004			.924
.947							-.006			.947
.964							-.003			.964
.981	.009	-.009	-.009		-.007	-.006	-.003	-.004	-.008	.981
.984					-.007				-.010	.984
.998							-.007			.998
1.000	-.036									1.000

Nose rake			Base rake		
Orifice station, y, in.	C_p top	C_p side	Orifice station, y, in.	C_p top	C_p side
.010	.687		.031	.199	.084
.030	1.277		.094	.436	.245
.050	1.328		.156	.597	.365
.070	1.351		.219	.775	.459
.090	1.372		.281	.957	.561
.110	1.395		.344	1.148	.694
.130	1.406		.406	1.266	.816
.150	1.395		.469	1.321	.938
.170	1.383		.750	1.358	
.190	1.344		1.000	1.471	
			1.250	1.556	
			1.500	1.609	

[redacted]

TABLE 10. - PRESSURE COEFFICIENTS FOR AN INTERCONTINENTAL BALLISTIC MISSILE FOR NOSE III WITH NATURAL TRANSITION AT M = 4.65 - Continued

(c) $\alpha = 0^{\circ}$

Model station, $\frac{x}{l}$	Cp for meridian angle, θ, deg –									Model station, $\frac{x}{l}$
	0	90	105	120	150	165	180	225	270	
.039							1.828			.039
.040							1.761			.040
.041							1.576			.041
.044							1.136			.044
.049							.503			.049
.055							.399			.055
.060	.409	.422	.428	.421	.419	.412	.409	.403		.060
.075	.117	.127	.129	.125	.127	.122	.121	.115		.075
.085	.113	.120	.120	.120	.119	.117	.117	.112	.108	.085
.096	.138									.096
.126		.096	.096	.095	.095	.093	.091	.088	.086	.126
.143							.008			.143
.154	.009	.008	.007	.007	.006		.006	.004	.004	.154
.171							.004			.171
.189							.001			.189
.206	.001	.0	.000	.001	.001	.000	.001	-.000	-.000	.206
.223							-.000			.223
.241							-.001			.241
.258	-.001	-.002	-.002	-.002	-.002	-.002	-.002	-.003	.016	.258
.275							-.002			.275
.293							-.002			.293
.310	-.004	-.006	-.005	-.004	-.005	-.004	-.003	-.005	-.005	.310
.327							-.004			.327
.344							-.004			.344
.362	-.004	-.006	-.005	-.003	-.002	-.002	-.000	-.000	-.000	.362
.379							.002			.379
.396	-.001	.002	.003	.003	.003	.003	.004	.004	.003	.396
.408							.005			.408
.426	.028	.007	.044	.007	.006	.006	.007	.005	.004	.426
.451	.030	.022	.021	.021	.035	.019	.019	.015	.013	.451
.476	.030	.028	.028	.028	.027	.026	.026	.024	.023	.476
.501	.035		.029	.028	.027	.028	.030		.025	.501
.530	.004	-.003	-.002	-.004	-.002		-.003	-.004	-.004	.530
.548							-.002			.548
.566							-.002			.566
.584	-.003	-.005	-.004	-.006	-.004	-.003	-.003	-.005	-.004	.584
.602							-.003			.602
.620							-.004			.620
.638	-.003	-.007		-.002	-.005		-.004		-.004	.638
.655							-.004			.655
.673							-.005			.673
.691	-.004	-.007	-.006		-.006	-.005		-.007	-.004	.691
.709							-.004			.709
.727							-.005			.727
.745	-.002	.022		-.006	-.005		-.004		-.004	.745
.763							-.004			.763
.781							-.004			.781
.799							-.004			.799
.817	-.002	-.006	-.005	-.006	-.003	-.003	-.003	-.004	-.004	.817
.834							-.003			.834
.870							-.003			.870
.888							-.002			.888
.921	-.037									.921
.924	-.002	-.005		-.005			-.003			.924
.947							-.003			.947
.964							-.003			.964
.981	.000	-.003	-.004		-.004	-.003	-.003	-.003	-.002	.981
.984					-.004				-.003	.984
.998							-.006			.998
1.000	-.037									1.000

Nose rake			Base rake		
Orifice station, y, in.	C_p top	C_p side	Orifice station, y, in.	C_p top	C_p side
.010	.494		.031	.090	.136
.030	1.164		.094	.196	.291
.050	1.254		.156	.272	.381
.070	1.261		.219	.323	.454
.090	1.268		.281	.360	.544
.110	1.263		.344	.411	.609
.130	1.261		.406	.471	.673
.150	1.247		.469	.528	.752
.170	1.238		.750	.811	
.190	1.192		1.000	1.007	
			1.250	1.187	
			1.500	1.314	

[redacted]

TABLE 10. - PRESSURE COEFFICIENTS FOR AN INTERCONTINENTAL BALLISTIC MISSILE FOR NOSE III WITH NATURAL TRANSITION AT M = 4.65 - CONTINUED

(d) $\alpha = 3.0^{\circ}$

Model station, $\frac{x}{l}$	Cp for meridian angle, θ, deg –									Model station, $\frac{x}{l}$
	0	90	105	120	150	165	180	225	270	
.039							1.850			.039
.040							1.814			.040
.041							1.632			.041
.044							1.235			.044
.049							.593			.049
.055							.480			.055
.060	.341	.421	.445	.457	.483	.484	.485	.453		.060
.075	.088	.125	.137	.143	.158	.160	.159	.142		.075
.085	.084	.120	.128	.138	.150	.152	.154	.137	.108	.085
.096	.103									.096
.126		.094	.101	.108	.118	.120	.120	.106	.086	.126
.143							.020			.143
.154	-.002	.007	.010	.013	.019		.020	.012	.004	.154
.171							.017			.171
.189							.014			.189
.206	-.005	.0	.002	.006	.010	.010	.011	.007	-.000	.206
.223							.009			.223
.241							.007			.241
.258	-.007	-.004	-.002	.000	.003	.005	.004	.001	.015	.258
.275							.004			.275
.293							.004			.293
.310	-.007	-.007	-.005	-.002	.001	.002	.003	-.000	-.007	.310
.327							.002			.327
.344							.002			.344
.362	-.005	-.007	-.006	-.004	.000	.001	.001	-.002	-.006	.362
.379							.001			.379
.396	.000	-.002	.032	-.002	.000	.001	.002	-.001	-.001	.396
.408							.009			.408
.426	.013	.008	.046	.016	.023	.025	.027	.020	.004	.426
.451	.016	.023	.028	.032	.054	.044	.047	.034	.019	.451
.476	.018	.027	.031	.037	.047	.050	.052	.040	.022	.476
.501	.025		.033	.039	.050	.054	.056		.023	.501
.530	.001	-.006	-.002	.000	.005		.008	-.000	-.009	.530
.548							.006			.548
.566							.004			.566
.584	-.005	-.010	-.006	-.004	-.001	-.000	.003	-.003	-.009	.584
.602							.002			.602
.620							.002			.620
.638	-.006	-.011		-.001	-.001		.002		-.011	.638
.655							.002			.655
.673							.002			.673
.691	-.005	-.012	-.009		-.001	-.000		-.004	-.011	.691
.709							.002			.709
.727							.002			.727
.745	-.005	.018		-.006	-.002		.002		-.011	.745
.763							.001			.763
.781							.002			.781
.799							.001			.799
.817	-.004	-.011	-.009	-.007	-.000	-.000	.002	-.003	-.009	.817
.834							.001			.834
.870							.002			.870
.888							.002			.888
.921	-.038									.921
.924	-.003	-.010		-.007			.001			.924
.947							-.000			.947
.964							.000			.964
.981	-.000	-.006	-.008		-.001	-.000	.001	-.004	-.008	.981
.984					-.002				-.009	.984
.998							-.000			.998
1.000	-.038									1.000

Nose rake			Base rake		
Orifice station, y, in.	Cp top	Cp side	Orifice station, y, in.	Cp top	Cp side
.010	.332		.031	.056	.074
.030	1.005		.094	.120	.388
.050	1.162		.156	.146	.701
.070	1.143		.219	.194	.784
.090	1.134		.281	.210	.867
.110	1.143		.344	.240	.915
.130	1.129		.406	.268	.989
.150	1.118		.469	.288	1.046
.170	1.104		.750	.376	
.190	1.053		1.000	.457	
			1.250	.572	
			1.500	.669	

[redacted]

TABLE 10. - PRESSURE COEFFICIENTS FOR AN INTERCONTINENTAL BALLISTIC MISSILE FOR NOSE III WITH NATURAL TRANSITION AT M = 4.65 - CONCLUDED

(e) $\alpha = 6.3^{\circ}$

Model station, $\frac{x}{l}$	Cp for meridian angle, θ, deg –									Model station, $\frac{x}{l}$
	0	90	105	120	150	165	180	225	270	
.039							1.822			.039
.040							1.836			.040
.041							1.693			.041
.044							1.319			.044
.049							.676			.049
.055							.568			.055
.060	.278	.420	.465	.501	.568	.578	.583	.517		.060
.075	.060	.128	.149	.168	.205	.210	.211	.175		.075
.085	.058	.121	.139	.162	.195	.201	.204	.172	.110	.085
.096	.075									.096
.126		.093	.107	.125	.155	.162	.164	.132	.086	.126
.143							.048			.143
.154	-.008	.006	.015	.025	.041		.047	.029	.002	.154
.171							.039			.171
.189							.033			.189
.206	-.009	-.0	.004	.012	.024	.027	.030	.014	-.003	.206
.223							.027			.223
.241							.026			.241
.258	-.009	-.006	-.001	.004	.019	.024	.025	.009	.013	.258
.275							.024			.275
.293							.022			.293
.310	-.008	-.010	-.005	.002	.015	.019	.021	.005	-.013	.310
.327							.020			.327
.344							.019			.344
.362	-.006	-.012	-.008	-.001	.012	.016	.018	.002	-.015	.362
.379							.017			.379
.396	-.003	-.012	.001	-.002	.011	.015	.016	.002	-.012	.396
.408							.022			.408
.426	.016	.002	.046	.025	.049	.057	.060	.034	-.003	.426
.451	.017	.014	.025	.042	.082	.080	.083	.050	.007	.451
.476	.016	.018	.031	.048	.076	.085	.088	.058	.012	.476
.501	.021		.033	.047	.077	.089	.091		.014	.501
.530	-.001	-.011	-.006	.001	.018		.024	.005	-.014	.530
.548							.021			.548
.566							.022			.566
.584	-.008	-.016	-.009	-.001	.013	.018	.020	.001	-.017	.584
.602							.020			.602
.620							.018			.620
.638	-.006	-.016		.000	.012		.019		-.017	.638
.655							.018			.655
.673							.018			.673
.691	-.006	-.018	-.011		.010	.015		-.000	-.019	.691
.709							.018			.709
.727							.017			.727
.745	-.006	.013		-.005	.010		.017		-.019	.745
.763							.018			.763
.781							.017			.781
.799							.017			.799
.817	-.006	-.017	-.013	-.006	.010	.015	.017	-.002	-.018	.817
.834							.018			.834
.870							.016			.870
.888							.017			.888
.921	-.037									.921
.924	-.006	-.017		-.007			.016			.924
.947							.013			.947
.964							.014			.964
.981	-.003	-.015	-.014		.008	.015	.015	-.002	-.017	.981
.984					.008				-.017	.984
.998							.012			.998
1.000	-.037									1.000

Nose rake			Base rake		
Orifice station, y, in.	Cp top	Cp side	Orifice station, y, in.	Cp top	Cp side
.010	.134		.031	.093	.001
.030	.798		.094	.229	.395
.050	1.031		.156	.275	.911
.070	1.017		.219	.330	.941
.090	1.010		.281	.342	.953
.110	1.001		.344	.365	.973
.130	.990		.406	.395	1.008
.150	.973		.469	.402	1.063
.170	.964		.750	.427	
.190	.909		1.000	.466	
			1.250	.503	
			1.500	.542	

[redacted]

TABLE 11. - PRESSURE COEFFICIENTS FOR AN INTERCONTINENTAL BALLISTIC MISSILE FOR NOSE III WITH FIXED TRANSITION AT M = 1.57

(a) α = -10.1°

Model station, $\frac{x}{l}$	Cp for meridian angle, θ, deg – 0	90	105	120	150	165	180	225	270	Model station, $\frac{x}{l}$
.039							1.514			.039
.040							1.367			.040
.041							1.102			.041
.044							.642			.044
.049							.074			.049
.055							.037			.055
.060		.555	.509	.415	.213	.149	.134	.331		.060
.075	.132	-.071	-.112	-.146	-.162	-.173	-.190	-.161		.075
.085	.273	-.005	-.052	-.101	-.129	-.122	-.110	-.118	-.017	.085
.096	.501									.096
.126		.093	.043	.004	-.008	-.016	-.026	-.009	.080	.126
.143							-.249			.143
.154	-.011	-.173	-.202	-.213	-.211	-.205	-.198	-.217		.154
.171							-.158			.171
.189							-.119			.189
.206	.025	-.155	-.169	-.176	-.123	-.100	-.091	-.144		.206
.223							-.066			.223
.241							-.048			.241
.258	.021	-.149	-.160	-.136	-.065	-.042	-.036	-.084	-.157	.258
.275							-.027			.275
.293							-.015			.293
.310	.018	-.150	-.139	-.087	-.041	-.019	-.008	-.053	-.156	.310
.327							-.006			.327
.344							-.003			.344
.362	.015	-.133	-.099	-.060	-.046	-.019	.000	-.047	-.129	.362
.379							.000			.379
.396	.009	-.112	-.087	-.042	-.039	-.016	.011	-.025	-.109	.396
.408							.008			.408
.426	.225	.079	.097	.087	.071	.158	.227	.083	.091	.426
.451	.212	.071	.065	.076	.060	.106	.146		.069	.451
.476	.204	.053	.045	.062	.042	.092	.113	.076	.053	.476
.501	.194	.044	.038	.046	.020	.070	.085	.046	.043	.501
.530	-.004	-.126	-.134	-.111	-.108	-.128	-.112	-.086	-.129	.530
.548							-.112			.548
.566							-.063			.566
.584	.025	-.115	-.100	-.085	-.086	-.066	-.053	-.080	-.120	.584
.602							-.044			.602
.620							-.037			.620
.638	.031	-.097		-.074	-.047				-.095	.638
.655							-.022			.655
.673							-.021			.673
.691	.030	-.118	-.099	-.062	-.040	-.041	-.017	-.038	-.102	.691
.709							-.020			.709
.727							-.018			.727
.745	.027	-.107		-.047	-.032		-.016		-.097	.745
.763							-.015			.763
.781							-.025			.781
.799							-.017			.799
.817	.043	-.085	-.055	-.032	-.028	-.025	-.007	-.029	-.074	.817
.834							-.013			.834
.852							-.010			.852
.870							-.002			.870
.888							-.003			.888
.906							-.000			.906
.921	-.187									.921
.924	.050	-.061		-.024	-.023		.001		-.080	.924
.947							.029			.947
.964							.045			.964
.981	.055	-.041	-.001		.004	.011	.039	.000	-.052	.981
1.000	-.194									1.000

Nose rake			Base rake		
Orifice station, y, in.	Cp top	Cp side	Orifice station, y, in.	Cp top	Cp side
.010	1.216		.031	.864	.438
.030	1.462		.094	1.551	1.026
.050	1.533		.156	1.635	1.491
.070	1.557		.219	1.571	1.616
.090	1.575		.281	1.577	1.534
.110	1.580		.344	1.568	1.489
.130	1.582		.406	1.568	1.502
.150	1.575		.469	1.575	1.494
.170	1.554		.750	1.568	
.190	1.468		1.000	1.567	
			1.250	1.570	
			1.500	1.577	

[redacted]

TABLE 11. - PRESSURE COEFFICIENTS FOR AN INTERCONTINENTAL BALLISTIC MISSILE FOR NOSE III WITH FIXED TRANSITION AT M = 1.57 - Continued

(b) $\alpha = -6.3^{\circ}$

Model station, $\frac{x}{l}$	Cp for meridian angle, θ, deg –									Model station, $\frac{x}{l}$
	0	90	105	120	150	165	180	225	270	
.039							1.542			.039
.040							1.425			.040
.041							1.185			.041
.044							.744			.044
.049							.194			.049
.055							.130			.055
.060	.738	.588	.552	.477	.346	.263	.244	.413		.060
.075	.053	-.058	-.082	-.101	-.113	-.122	-.127	-.118		.075
.085	.167	.009	-.018	-.047	-.069	-.060	-.066	-.063	-.000	.085
.096	.360									.096
.126		.113	.080	.058	.032	.024	.017	.036	.099	.126
.143							-.218			.143
.154	-.064	-.150	-.163	-.177	-.190	-.190	-.187	-.193		.154
.171							-.158			.171
.189							-.120			.189
.206	-.022	-.115	-.122	-.132	-.104	-.094	-.090	-.114		.206
.223							-.066			.223
.241							-.053			.241
.258	-.017	-.090	-.091	-.081	-.054	-.043	-.043	-.062	-.092	.258
.275							-.034			.275
.293							-.026			.293
.310	-.011	-.070	-.070	-.055	-.030	-.019	-.017	-.036	-.075	.310
.327							-.009			.327
.344							-.009			.344
.362	-.010	-.061	-.049	-.032	-.020	-.012	-.008	-.022	-.060	.362
.379							-.008			.379
.396	-.009	-.052	-.047	-.039	-.014	-.008	.000	-.021	-.052	.396
.408							.037			.408
.426	.197	.137	.141	.139	.132	.146	.159	.132	.140	.426
.451	.184	.121	.116	.114	.116	.120	.131		.118	.451
.476	.177	.103	.093	.091	.094	.100	.108	.098	.104	.476
.501	.166	.090	.081	.074	.066	.081	.097	.069	.089	.501
.530	-.031	-.093	-.102	-.104	-.081	-.087	-.105	-.077	-.096	.530
.548							-.072			.548
.566							-.054			.566
.584	-.002	-.073	-.069	-.067	-.060	-.058	-.051	-.060	-.078	.584
.602							-.042			.602
.620							-.034			.620
.638	.007	-.060		-.051	-.037				-.059	.638
.655							-.016			.655
.673							-.019			.673
.691	.002	-.064	-.056	-.043	-.029	-.027	-.010	-.023	-.051	.691
.709							-.015			.709
.727							-.011			.727
.745	.007	-.053		-.035	-.020		-.007		-.044	.745
.763							-.004			.763
.781							-.012			.781
.799							-.003			.799
.817	.018	-.043	-.034	-.021	-.012	-.006	.005	-.012	-.030	.817
.834							-.000			.834
.852							.004			.852
.870							.011			.870
.888							.010			.888
.906							.010			.906
.921	-.145									.921
.924	.011	-.022		-.013	.000		.016		-.036	.924
.947							.076			.947
.964							.061			.964
.981	.052	-.007	.010		.034	.038	.046	.024	-.013	.981
1.000	-.154									1.000

Nose rake			Base rake		
Orifice station, y, in.	C_p top	C_p side	Orifice station, y, in.	C_p top	C_p side
.010	1.085		.031	.754	.523
.030	1.418		.094	1.294	.924
.050	1.520		.156	1.582	1.261
.070	1.556		.219	1.574	1.501
.090	1.569		.281	1.553	1.554
.110	1.572		.344	1.556	1.523
.130	1.565		.406	1.558	1.518
.150	1.552		.469	1.564	1.520
.170	1.527		.750	1.563	
.190	1.428		1.000	1.567	
			1.250	1.563	
			1.500	1.557	

[redacted]

TABLE 11. - PRESSURE COEFFICIENTS FOR AN INTERCONTINENTAL BALLISTIC MISSILE FOR NOSE III WITH FIXED TRANSITION AT M = 1.57 - Continued

(c) $\alpha = -3.0^{\circ}$

Model station, $\frac{x}{l}$	Cp for meridian angle, θ, deg – 0	90	105	120	150	165	180	225	270	Model station, $\frac{x}{l}$
.039							1.555			.039
.040							1.471			.040
.041							1.254			.041
.044							.833			.044
.049							.327			.049
.055							.207			.055
.060	.676	.613	.589	.538	.466	.401	.386	.497		.060
.075	-.000	-.044	-.054	-.067	-.068	-.077	-.081	-.083		.075
.085	.090	.026	.011	-.007	-.017	-.011	-.028	-.013	.013	.085
.096	.255									.096
.126		.123	.107	.091	.075	.071	.066	.074	.109	.126
.143							-.205			.143
.154	-.104	-.134	-.144	-.155	-.164	-.166	-.163	-.165		.154
.171							-.140			.171
.189							-.114			.189
.206	-.056	-.088	-.091	-.103	-.093	-.093	-.093	-.095		.206
.223							-.074			.223
.241							-.061			.241
.258	-.038	-.056	-.060	-.062	-.053	-.049	-.051	-.053	-.057	.258
.275							-.039			.275
.293							-.027			.293
.310	-.025	-.041	-.040	-.032	-.024	-.019	-.019	-.025	-.043	.310
.327							-.018			.327
.344							-.016			.344
.362	-.018	-.024	-.021	-.018	-.019	-.015	-.013	-.018	-.025	.362
.379							-.013			.379
.396	-.017	-.022	-.024	-.021	-.012	-.009	-.002	-.015	-.023	.396
.408							.029			.408
.426	.183	.167	.168	.165	.162	.162	.161	.164	.165	.426
.451	.169	.148	.144	.141	.135	.132	.135		.143	.451
.476	.150	.127	.118	.115	.114	.113	.113	.116	.130	.476
.501	.138	.111	.108	.101	.096	.095	.097	.099	.111	.501
.530	-.051	-.072	-.076	-.082	-.078	-.079	-.079	-.075	-.077	.530
.548							-.065			.548
.566							-.049			.566
.584	-.013	-.049	-.049	-.051	-.042	-.044	-.043	-.047	-.051	.584
.602							-.043			.602
.620							-.035			.620
.638	-.015	-.028		-.031	-.027				-.027	.638
.655							-.024			.655
.673							-.022			.673
.691	-.011	-.034	-.033	-.033	-.030	-.025	-.015	-.017	-.024	.691
.709							-.010			.709
.727							-.011			.727
.745	-.008	-.027		-.021	-.013		-.004		-.018	.745
.763							-.008			.763
.781							-.013			.781
.799							-.004			.799
.817	.009	-.012	-.013	-.012	-.006	-.002	.000	-.004	.000	.817
.834							-.003			.834
.852							.002			.852
.870							.003			.870
.888							.009			.888
.906							.007			.906
.921	-.080									.921
.924	.020	-.001		-.006	.004		.011		-.014	.924
.947							.007			.947
.964							.012			.964
.981	.036	.016	.006		.008	.009	.007	.002	.006	.981
1.000	-.085									1.000

Nose rake			Base rake		
Orifice station, y, in.	Cp top	Cp side	Orifice station, y, in.	Cp top	Cp side
.010	.925		.031	.634	.521
.030	1.357		.094	.993	.779
.050	1.502		.156	1.270	.990
.070	1.541		.219	1.452	1.201
.090	1.557		.281	1.504	1.365
.110	1.549		.344	1.528	1.465
.130	1.532		.406	1.529	1.501
.150	1.518		.469	1.534	1.514
.170	1.482		.750	1.529	
.190	1.382		1.000	1.538	
			1.250	1.542	
			1.500	1.543	

[redacted]

TABLE 11. - PRESSURE COEFFICIENTS FOR AN INTERCONTINENTAL BALLISTIC MISSILE FOR NOSE III WITH FIXED TRANSITION AT M = 1.57 - Continued

(d) $\alpha = 0^{\circ}$

Model station, $\frac{x}{l}$	Cp for meridian angle, θ, deg –									Model station, $\frac{x}{l}$
	0	90	105	120	150	165	180	225	270	
.039							1.557			.039
.040							1.506			.040
.041							1.316			.041
.044							.918			.044
.049							.383			.049
.055							.331			.055
.060	.597	.617	.618	.595	.593	.575	.580	.584		.060
.075	-.043	-.036	-.037	-.040	-.029	-.040	-.046	-.051		.075
.085	.031	.033	.031	.027	.027	.035	.016	.025	.021	.085
.096	.169									.096
.126		.127	.124	.121	.122	.121	.116	.111	.113	.126
.143							-.177			.143
.154	-.137	-.131	-.134	-.137	-.140	-.140	-.135	-.145		.154
.171							-.116			.171
.189							-.095			.189
.206	-.078	-.081	-.077	-.086	-.076	-.077	-.078	-.080		.206
.223							-.061			.223
.241							-.054			.241
.258	-.054	-.044	-.046	-.045	-.048	-.048	-.052	-.045	-.044	.258
.275							-.045			.275
.293							-.038			.293
.310	-.026	-.032	-.032	-.027	-.027	-.022	-.022	-.027	-.033	.310
.327							-.018			.327
.344							-.019			.344
.362	-.018	-.015	-.012	-.009	-.019	-.018	-.016	-.016	-.014	.362
.379							-.018			.379
.396	-.017	-.011	-.015	-.016	-.013	-.013	-.007	-.014	-.012	.396
.408							-.012			.408
.426	.170	.175	.177	.176	.175	.178	.175	.174	.173	.426
.451	.150	.155	.154	.156	.153	.147	.150		.151	.451
.476	.131	.134	.132	.130	.131	.130	.129	.132	.137	.476
.501	.115	.118	.120	.117	.118	.116	.116	.118	.119	.501
.530	-.066	-.065	-.066	-.071	-.068	-.068	-.069	-.067	-.069	.530
.548							-.055			.548
.566							-.043			.566
.584	-.028	-.040	-.038	-.040	-.039	-.039	-.035	-.038	-.042	.584
.602							-.035			.602
.620							-.033			.620
.638	-.026	-.019		-.021	-.021				-.018	.638
.655							-.022			.655
.673							-.021			.673
.691	-.017	-.025	-.024	-.024	-.030	-.026	-.016	-.014	-.016	.691
.709							-.014			.709
.727							-.010			.727
.745	-.012	-.018		-.013	-.012		-.007		-.009	.745
.763							-.009			.763
.781							-.017			.781
.799							-.007			.799
.817	.003	-.006	-.006	-.005	-.005	-.002	-.000	-.000	.006	.817
.834							-.005			.834
.852							.002			.852
.870							.003			.870
.888							.006			.888
.906							.008			.906
.921	-.066									.921
.924	.013	.008		-.004	.005		.010		-.001	.924
.947							.008			.947
.964							.012			.964
.981	.047	.029	.012		.012	.010	.006	.008	.010	.981
1.000	-.069									1.000

Nose rake			Base rake		
Orifice station, y, in.	Cp top	Cp side	Orifice station, y, in.	Cp top	Cp side
.010	.794		.031	.479	.501
.030	1.311		.094	.679	.692
.050	1.492		.156	.829	.842
.070	1.541		.219	.973	.998
.090	1.550		.281	1.098	1.139
.110	1.526		.344	1.226	1.265
.130	1.491		.406	1.330	1.368
.150	1.469		.469	1.408	1.442
.170	1.427		.750	1.488	
.190	1.335		1.000	1.505	
			1.250	1.519	
			1.500	1.529	

[redacted]

TABLE 11. - PRESSURE COEFFICIENTS FOR AN INTERCONTINENTAL BALLISTIC MISSILE FOR NOSE III WITH FIXED TRANSITION AT M = 1.57 - Continued

(e) $\alpha = 3.0^{\circ}$

Model station, $\frac{x}{l}$	Cp for meridian angle, θ, deg –									Model station, $\frac{x}{l}$
	0	90	105	120	150	165	180	225	270	
.039							1.556			.039
.040							1.531			.040
.041							1.374			.041
.044							.998			.044
.049							.445			.049
.055							.630			.055
.060	.428	.618	.635	.630	.656	.651	.651	.632		.060
.075	-.075	-.040	-.032	-.025	.004	-.003	-.009	-.028		.075
.085	-.013	.028	.039	.052	.070	.086	.067	.057	.015	.085
.096	.108									.096
.126		.123	.134	.144	.167	.172	.169	.144	.111	.126
.143							-.147			.143
.154	-.164	-.134	-.129	-.124	-.115	-.111	-.104	-.126		.154
.171							-.091			.171
.189							-.073			.189
.206	-.090	-.086	-.076	-.080	-.062	-.058	-.058	-.070		.206
.223							-.045			.223
.241							-.041			.241
.258	-.052	-.051	-.051	-.047	-.039	-.035			-.053	.258
.275							-.042			.275
.293							-.032			.293
.310	-.023	-.039	-.041	-.033	-.030	-.025	-.024	-.033	-.043	.310
.327							-.017			.327
.344							-.017			.344
.362	-.012	-.024	-.020	-.015	-.020	-.016	-.014	-.021	-.022	.362
.379							-.017			.379
.396	-.011	-.018	-.022	-.023	-.017	-.015	-.007	-.020	-.019	.396
.408							-.015			.408
.426	.162	.168	.174	.175	.179	.187	.183	.175	.167	.426
.451	.138	.149	.153	.158	.166	.162	.167		.145	.451
.476	.119	.129	.131	.135	.145	.146	.147	.141	.132	.476
.501	.099	.112	.121	.122	.135	.135	.137	.130	.114	.501
.530	-.073	-.070	-.068	-.069	-.058	-.056	-.054	-.061	-.074	.530
.548							-.041			.548
.566							-.029			.566
.584	-.037	-.045	-.041	-.040	-.030	-.028	-.021	-.033	-.050	.584
.602							-.025			.602
.620							-.023			.620
.638	-.027	-.026		-.023	-.015				-.024	.638
.655							-.013			.655
.673							-.015			.673
.691	-.014	-.032	-.028	-.026	-.030	-.023	-.011	-.016	-.023	.691
.709							-.008			.709
.727							-.010			.727
.745	-.010	-.023		-.018	-.008		-.004		-.015	.745
.763							-.008			.763
.781							-.016			.781
.799							-.005			.799
.817	.003	-.012	-.010	-.011	-.006	-.001	.002	-.002	-.001	.817
.834							-.003			.834
.852							.006			.852
.870							.005			.870
.888							.009			.888
.906							.009			.906
.921	-.073									.921
.924	.005	.003		-.009	.003		.013		-.008	.924
.947							.012			.947
.964							.017			.964
.981	.060	.020	.005		.012	.011	.010	.006	.002	.981
1.000	-.079									1.000

Nose rake			Base rake		
Orifice station, y, in.	C_p top	C_p side	Orifice station, y, in.	C_p top	C_p side
.010	.670		.031	.429	.523
.030	1.255		.094	.579	.753
.050	1.480		.156	.673	.948
.070	1.527		.219	.748	1.150
.090	1.535		.281	.821	1.312
.110	1.501		.344	.890	1.425
.130	1.457		.406	.965	1.480
.150	1.431		.469	1.030	1.503
.170	1.392		.750	1.297	
.190	1.297		1.000	1.436	
			1.250	1.459	
			1.500	1.475	

[redacted]

[redacted]

TABLE 11. - PRESSURE COEFFICIENTS FOR AN INTERCONTINENTAL BALLISTIC MISSILE FOR NOSE III WITH FIXED TRANSITION AT M = 1.57 - Continued

(f) $\alpha = 6.3^{\circ}$

Model station, $\frac{x}{l}$	Cp for meridian angle, θ, deg –									Model station, $\frac{x}{l}$
	0	90	105	120	150	165	180	225	270	
.039							1.548			.039
.040							1.553			.040
.041							1.434			.041
.044							1.097			.044
.049							.600			.049
.055							.745			.055
.060	.278	.590	.635	.647	.711	.716	.719	.667		.060
.075	-.124	-.052	-.033	-.006	.048	.048	.048	.003		.075
.085	-.056	.016	.048	.082	.134	.164	.144	.105	.002	.085
.096	.044									.096
.126		.112	.142	.171	.226	.238	.239	.186	.099	.126
.143							-.107			.143
.154	-.194	-.147	-.131	-.111	-.080	-.070	-.062	-.103		.154
.171							-.050			.171
.189							-.036			.189
.206	-.094	-.106	-.091	-.082	-.039	-.029	-.026	-.061		.206
.223							-.016			.223
.241							-.017			.241
.258	-.043	-.088	-.081	-.058	-.025	-.013	-.018	-.045	-.091	.258
.275							-.019			.275
.293							-.016			.293
.310	-.018	-.071	-.068	-.053	-.026	-.014	-.010	-.047	-.073	.310
.327							-.015			.327
.344							-.014			.344
.362	-.005	-.062	-.058	-.046	-.025	-.013	-.008	-.039	-.057	.362
.379							-.007			.379
.396	-.006	-.048	-.050	-.041	-.015	-.007	.001	-.035	-.048	.396
.408							-.009			.408
.426	.160	.139	.144	.152	.177	.195	.194	.162	.140	.426
.451	.133	.121	.128	.140	.170	.175	.182		.120	.451
.476	.110	.103	.110	.128	.167	.178	.181	.147	.106	.476
.501	.091	.092	.110	.118	.150	.158	.164	.138	.092	.501
.530	-.094	-.090	-.081	-.072	-.043	-.038	-.035	-.058	-.096	.530
.548							-.018			.548
.566							-.007			.566
.584	-.045	-.071	-.059	-.046	-.020	-.013	-.006	-.032	-.075	.584
.602							-.002			.602
.620							.007			.620
.638	-.028	-.056		-.028	-.005				-.052	.638
.655							.003			.655
.673							-.000			.673
.691	-.016	-.061	-.054	-.040	-.026	-.012	.002	-.023	-.049	.691
.709							-.000			.709
.727							.003			.727
.745	-.000	-.053		-.038	-.004		.005		-.042	.745
.763							.010			.763
.781							-.008			.781
.799							.000			.799
.817	.008	-.039	-.037	-.030	-.007	.006	.013	-.015	-.027	.817
.834							.004			.834
.852							.014			.852
.870							.015			.870
.888							.016			.888
.906							.020			.906
.921	-.134									.921
.924	.017	-.019		-.026	.004		.022		-.034	.924
.947							.021			.947
.964							.026			.964
.981	.076	-.009	-.019		.014	.018	.019	-.002	-.020	.981
1.000	-.147									1.000

Nose rake			Base rake		
Orifice station, y, in.	C_p top	C_p side	Orifice station, y, in.	C_p top	C_p side
.010	.540		.031	.677	.532
.030	1.181		.094	1.084	.920
.050	1.459		.156	1.284	1.251
.070	1.516		.219	1.336	1.495
.090	1.510		.281	1.350	1.535
.110	1.463		.344	1.363	1.504
.130	1.412		.406	1.377	1.510
.150	1.380		.469	1.390	1.517
.170	1.346		.750	1.427	
.190	1.257		1.000	1.450	
			1.250	1.454	
			1.500	1.457	

[redacted]

[redacted]

TABLE 11. - PRESSURE COEFFICIENTS FOR AN INTERCONTINENTAL BALLISTIC MISSILE FOR NOSE III WITH FIXED TRANSITION AT M = 1.57 - Concluded

(g) $\alpha = 10.1^{\circ}$

Model station, $\frac{x}{l}$	Cp for meridian angle, θ, deg – 0	90	105	120	150	165	180	225	270	Model station, $\frac{x}{l}$
.039							1.521			.039
.040							1.560			.040
.041							1.485			.041
.044							1.210			.044
.049							.786			.049
.055							.851			.055
.060	.171	.561	.631	.665	.770	.788	.794	.704		.060
.075	-.151	-.071	-.035	.021	.115	.125	.131	.050		.075
.085	-.103	.001	.057	.124	.224	.271	.253	.173	-.013	.085
.096	-.019									.096
.126		.091	.145	.200	.299	.322	.326	.235	.078	.126
.143							-.056			.143
.154	-.207	-.171	-.137	-.098	-.038	-.018	-.007	-.076		.154
.171							.003			.171
.189							.016			.189
.206	-.092	-.154	-.121	-.088	-.006	.016	.022	-.046		.206
.223							.029			.223
.241							.024			.241
.258	-.036	-.147	-.122	-.082	-.001	.023	.020	-.047	-.151	.258
.275							.017			.275
.293							.016			.293
.310	-.012	-.156	-.131	-.086	-.015	.009	.019	-.057	-.151	.310
.327							.013			.327
.344							.011			.344
.362	.001	-.136	-.137	-.096	-.016	.011	.020	-.058	-.127	.362
.379							.016			.379
.396	.002	-.110	-.121	-.099	-.015	.008	.022	-.068	-.109	.396
.408							.011			.408
.426	.230	.077	.068	.085	.174	.217	.223	.123	.084	.426
.451	.145	.069	.074	.092	.168	.195	.210		.070	.451
.476	.111	.051	.068	.098	.166	.191	.200	.134	.053	.476
.501	.088	.041	.066	.093	.162	.185	.196	.131	.041	.501
.530	-.111	-.127	-.111	-.088	-.030	-.013	-.005	-.056	-.135	.530
.548							.009			.548
.566							.021			.566
.584	-.051	-.114	-.093	-.066	-.003	.014	.024	-.036	-.120	.584
.602							.033			.602
.620							.025			.620
.638	-.031	-.101		-.059	.005				-.095	.638
.655							.033			.655
.673							.029			.673
.691	-.023	-.118	-.097	-.072	-.015	.011	.031	-.032	-.106	.691
.709							.034			.709
.727							.029			.727
.745	-.012	-.107		-.069	-.002		.027		-.096	.745
.763							.025			.763
.781							.013			.781
.799							.023			.799
.817	-.004	-.087	-.091	-.071	-.003	.024	.035	-.033	-.076	.817
.834							.029			.834
.852							.036			.852
.870							.039			.870
.888							.036			.888
.906							.037			.906
.921	-.181									.921
.924	.000	-.060		-.062	.002		.042		-.079	.924
.947							.041			.947
.964							.047			.964
.981	.042	-.040	-.063		.017	.035	.040	-.017	-.058	.981
1.000	-.191									1.000

Nose rake			Base rake		
Orifice station, y, in.	C_p top	C_p side	Orifice station, y, in.	C_p top	C_p side
.010	.396		.031	.832	.450
.030	1.060		.094	1.440	1.036
.050	1.416		.156	1.459	1.490
.070	1.488		.219	1.410	1.618
.090	1.471		.281	1.423	1.526
.110	1.406		.344	1.412	1.493
.130	1.348		.406	1.414	1.503
.150	1.318		.469	1.420	1.508
.170	1.287		.750	1.408	
.190	1.199		1.000	1.415	
			1.250	1.427	
			1.500	1.446	

[redacted]

[redacted]

TABLE 12. - PRESSURE COEFFICIENTS FOR AN INTERCONTINENTAL BALLISTIC MISSILE FOR NOSE III WITH FIXED TRANSITION AT M = 2.29

(a) $\alpha = -10.1^{\circ}$

Model station, $\frac{x}{l}$	Cp for meridian angle, θ, deg –									Model station, $\frac{x}{l}$
	0	90	105	120	150	165	180	225	270	
.039							1.638			.039
.040							1.482			.040
.041							1.205			.041
.044							.749			.044
.049							.205			.049
.055							.124			.055
.060	.801	.470	.401	.307	.200	.185	.168	.241		.060
.075	.225	.062	.026	-.005	-.048	-.064	-.067	-.036		.075
.085	.259	.067	.034	.002	-.036	-.049	-.053	-.020	.062	.085
.096	.300									.096
.126		.079	.043	.014	-.009	-.012	-.010	-.002	.077	.126
.143							-.130			.143
.154	.038	-.076	-.098	-.112	-.123		-.118	-.120	-.079	.154
.171							-.104			.171
.189							-.089			.189
.206	.041	-.082	-.100	-.111	-.092	-.081	-.076	-.103	-.083	.206
.223							-.063			.223
.241							-.055			.241
.258	.037	-.090	-.110	-.115	-.069	-.055	-.048	-.087	-.089	.258
.275							-.040			.275
.293							-.035			.293
.310	.036	-.102	-.122	-.111	-.055	-.040	-.029	-.065	-.102	.310
.327							-.025			.327
.344							-.021			.344
.362	.033	-.111	-.132	-.077	-.053	-.036	-.017	-.054	-.112	.362
.379							-.015			.379
.396	.030	-.119	-.125	-.065	-.057	-.035	-.009	-.053	-.119	.396
.408							-.010			.408
.426	.171	-.049	-.001	.009	.002	.084	.098	.014	-.052	.426
.451	.169	-.048	-.003	.014	.002	.046	.094	.022	-.049	.451
.476	.169	-.043	-.002	.018	-.006	.042	.068	.023	-.043	.476
.501	.167		-.000	.015	-.016	.034	.051		-.030	.501
.530	.024	-.104	-.088	-.060	-.095		-.051	-.055	-.102	.530
.548							-.054			.548
.566							-.053			.566
.584	.027	-.094	-.070	-.056	-.089	-.052	-.041	-.058	-.091	.584
.602							-.036			.602
.620							-.032			.620
.638	.026	-.088		-.060	-.067		-.027		-.087	.638
.655							-.025			.655
.673							-.025			.673
.691	.024	-.090	-.077		-.050	-.038		-.051	-.088	.691
.709							-.025			.709
.727							-.025			.727
.745	.026	-.088		-.050	-.044		-.024		-.088	.745
.763							-.025			.763
.781							-.028			.781
.799							-.028			.799
.817	.025	-.094	-.056	-.043	-.045	-.040	-.025	-.038	-.090	.817
.834							-.028			.834
.870							-.025			.870
.888							-.026			.888
.921	-.167									.921
.924	.025	-.075		-.040			-.024			.924
.947							-.025			.947
.964							-.026			.964
.981	.060	-.061	-.037		-.041	-.041	-.026	-.037	-.065	.981
.984					-.044				-.078	.984
.998							-.029			.998
1.000	-.168									1.000

Nose rake			Base rake		
Orifice station, y, in.	Cp top	Cp side	Orifice station, y, in.	Cp top	Cp side
.010	1.218		.031	.727	.258
.030	1.607		.094	1.717	.818
.050	1.705		.156	1.714	1.311
.070	1.729		.219	1.763	1.392
.090	1.659		.281	1.761	1.450
.110	1.668		.344	1.756	1.461
.130	1.674		.406	1.756	1.473
.150	1.682		.469	1.754	1.480
.170	1.687		.750	1.749	
.190	1.616		1.000	1.747	
			1.250	1.725	
			1.500	1.714	

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TABLE 12. - PRESSURE COEFFICIENTS FOR AN INTERCONTINENTAL BALLISTIC MISSILE FOR NOSE III WITH FIXED TRANSITION AT M = 2.29 - Continued

(b) $\alpha = -6.3^{\circ}$

Model station, $\frac{x}{l}$	Cp for meridian angle, θ, deg – 0	90	105	120	150	165	180	225	270	Model station, $\frac{x}{l}$
.039							1.663			.039
.040							1.540			.040
.041							1.293			.041
.044							.846			.044
.049							.286			.049
.055							.216			.055
.060	.663	.453	.419	.356	.293	.273	.256	.311		.060
.075	.152	.060	.037	.014	-.010	-.022	-.026	-.006		.075
.085	.176	.069	.049	.026	-.000	-.008	-.012	.010	.064	.085
.096	.206									.096
.126		.086	.065	.046	.026	.021	.019	.032	.084	.126
.143							-.114			.143
.154	-.007	-.070	-.082	-.093	-.104		-.104	-.100	-.073	.154
.171							-.093			.171
.189							-.083			.189
.206	-.003	-.064	-.072	-.080	-.076	-.074	-.074	-.076	-.065	.206
.223							-.063			.223
.241							-.055			.241
.258	-.001	-.061	-.070	-.070	-.055	-.049	-.048	-.061	-.060	.258
.275							-.042			.275
.293							-.037			.293
.310	-.000	-.063	-.067	-.060	-.042	-.033	-.032	-.045	-.060	.310
.327							-.027			.327
.344							-.025			.344
.362	-.000	-.063	-.061	-.049	-.031	-.025	-.022	-.036	-.060	.362
.379							-.022			.379
.396	-.004	-.062	-.058	-.045	-.028	-.023	-.019	-.032	-.058	.396
.408							-.019			.408
.426	.120	.036	.047	.055	.057	.067	.075	.056	.039	.426
.451	.121	.043	.045	.048	.057	.062	.069	.054	.042	.451
.476	.117	.043	.041	.042	.050	.054	.060	.049	.044	.476
.501	.116		.037	.037	.041	.045	.052		.041	.501
.530	-.012	-.060	-.064	-.060	-.043		-.049	-.049	-.061	.530
.548							-.042			.548
.566							-.034			.566
.584	-.006	-.057	-.056	-.048	-.040	-.038	-.031	-.040	-.056	.584
.602							-.030			.602
.620							-.028			.620
.638	-.005	-.052		-.040	-.033		-.026		-.051	.638
.655							-.024			.655
.673							-.023			.673
.691	-.002	-.051	-.046		-.030	-.029		-.030	-.049	.691
.709							-.020			.709
.727							-.018			.727
.745	-.000	-.045		-.035	-.026		-.017		-.044	.745
.763							-.015			.763
.781							-.018			.781
.799							-.016			.799
.817	.001	-.045	-.039	-.029	-.022	-.020	-.011	-.021	-.040	.817
.834							-.012			.834
.870							-.009			.870
.888							-.009			.888
.921	-.151									.921
.924	.003	-.041		-.025			-.008			.924
.947							-.009			.947
.964							-.005			.964
.981	.033	-.036	-.026		-.016	-.014	-.008	-.016	-.033	.981
.984					-.020				-.040	.984
.998							-.012			.998
1.000	-.153									1.000

Nose rake			Base rake		
Orifice station, y, in.	C_p top	C_p side	Orifice station, y, in.	C_p top	C_p side
.010	1.080		.031	.592	.366
.030	1.565		.094	1.310	.816
.050	1.669		.156	1.494	1.108
.070	1.645		.219	1.626	1.290
.090	1.544		.281	1.630	1.405
.110	1.553		.344	1.638	1.445
.130	1.563		.406	1.645	1.473
.150	1.570		.469	1.651	1.488
.170	1.565		.750	1.668	
.190	1.499		1.000	1.659	
			1.250	1.669	
			1.500	1.655	

[redacted]

TABLE 12. - PRESSURE COEFFICIENTS FOR AN INTERCONTINENTAL BALLISTIC MISSILE FOR NOSE III WITH FIXED TRANSITION AT M = 2.29 - Continued

(c) $\alpha = -3.0^{\circ}$

Model station, $\frac{x}{l}$	Cp for meridian angle, θ, deg –									Model station, $\frac{x}{l}$
	0	90	105	120	150	165	180	225	270	
.039							1.680			.039
.040							1.584			.040
.041							1.376			.041
.044							.944			.044
.049							.370			.049
.055							.286			.055
.060	.546	.453	.446	.405	.381	.362	.349	.380		.060
.075	.100	.062	.050	.040	.030	.020	.018	.027		.075
.085	.118	.072	.063	.053	.038	.035	.032	.043	.067	.085
.096	.143									.096
.126		.095	.084	.073	.063	.058	.057	.065	.093	.126
.143							-.095			.143
.154	-.039	-.065	-.071	-.076	-.084		-.084	-.083	-.068	.154
.171							-.077			.171
.189							-.069			.189
.206	-.029	-.051	-.054	-.060	-.063	-.063	-.063	-.060	-.052	.206
.223							-.056			.223
.241							-.050			.241
.258	-.025	-.043	-.045	-.047	-.045	-.045	-.046	-.045	-.039	.258
.275							-.041			.275
.293							-.037			.293
.310	-.018	-.037	-.039	-.038	-.035	-.033	-.031	-.033	-.034	.310
.327							-.028			.327
.344							-.025			.344
.362	-.017	-.034	-.032	-.029	-.027	-.024	-.022	-.025	-.028	.362
.379							-.021			.379
.396	-.018	-.030	-.030	-.027	-.022	-.020	-.017	-.022	-.026	.396
.408							-.018			.408
.426	.099	.075	.078	.076	.077	.078	.077	.078	.077	.426
.451	.096	.074	.073	.072	.070	.069	.070	.072	.075	.451
.476	.094	.070	.066	.065	.063	.065	.066	.063	.072	.476
.501	.092		.062	.057	.060	.061	.063		.068	.501
.530	-.027	-.040	-.044	-.043	-.038		-.038	-.038	-.040	.530
.548							-.033			.548
.566							-.030			.566
.584	-.022	-.037	-.035	-.032	-.032	-.032	-.029	-.029	-.033	.584
.602							-.026			.602
.620							-.023			.620
.638	-.018	-.029		-.026	-.023		-.022		-.026	.638
.655							-.022			.655
.673							-.021			.673
.691	-.014	-.027	-.026		-.025	-.023		-.023	-.024	.691
.709							-.019			.709
.727							-.017			.727
.745	-.012	-.020		-.022	-.019		-.016		-.018	.745
.763							-.015			.763
.781							-.016			.781
.799							-.013			.799
.817	-.008	-.021	-.020	-.018	-.014	-.012	-.010	-.013	-.014	.817
.834							-.010			.834
.870							-.008			.870
.888							-.006			.888
.921	-.129									.921
.924	-.005	-.017		-.018			-.005			.924
.947							-.006			.947
.964							-.003			.964
.981	.016	-.015	-.012		-.006	-.005	-.007	-.006	-.009	.981
.984					-.011				-.015	.984
.998							-.017			.998
1.000	-.133									1.000

Nose rake			Base rake		
Orifice station, y, in.	Cp top	Cp side	Orifice station, y, in.	Cp top	Cp side
.010	.960		.031	.433	.345
.030	1.540		.094	.853	.600
.050	1.624		.156	1.076	.785
.070	1.559		.219	1.280	.944
.090	1.453		.281	1.450	1.084
.110	1.461		.344	1.520	1.225
.130	1.463		.406	1.551	1.329
.150	1.471		.469	1.574	1.402
.170	1.469		.750	1.598	
.190	1.402		1.000	1.594	
			1.250	1.619	
			1.500	1.626	

[redacted]

TABLE 12. - PRESSURE COEFFICIENTS FOR AN INTERCONTINENTAL BALLISTIC MISSILE FOR NOSE III WITH FIXED TRANSITION AT M = 2.29 - Continued

(d) $\alpha = 0^{\circ}$

Model station, $\frac{x}{l}$	Cp for meridian angle, θ, deg –									Model station, $\frac{x}{l}$
	0	90	105	120	150	165	180	225	270	
.039							1.684			.039
.040							1.630			.040
.041							1.438			.041
.044							1.028			.044
.049							.476			.049
.055							.375			.055
.060	.443	.449	.467	.449	.462	.440	.433	.445		.060
.075	.053	.059	.060	.063	.066	.061	.060	.056		.075
.085	.068	.071	.074	.074	.075	.076	.074	.073	.067	.085
.096	.091									.096
.126		.094	.095	.094	.098	.096	.095	.094	.095	.126
.143							-.073			.143
.154	-.065	-.064	-.064	-.064	-.064		-.062	-.066	-.065	.154
.171							-.057			.171
.189							-.052			.189
.206	-.050	-.048	-.047	-.050	-.047	-.047	-.047	-.047	-.047	.206
.223							-.043			.223
.241							-.040			.241
.258	-.039	-.036	-.037	-.036	-.036	-.036	-.038	-.036	-.033	.258
.275							-.035			.275
.293							-.034			.293
.310	-.030	-.030	-.031	-.030	-.031	-.030	-.029	-.027	-.027	.310
.327							-.026			.327
.344							-.025			.344
.362	-.024	-.027	-.025	-.025	-.026	-.024	-.023	-.021	-.021	.362
.379							-.022			.379
.396	-.021	-.024	-.025	-.024	-.023	-.021	-.018	-.020	-.019	.396
.408							-.020			.408
.426	.087	.082	.086	.084	.084	.086	.086	.087	.086	.426
.451	.083	.080	.081	.082	.084	.083	.084	.083	.082	.451
.476	.078	.076	.075	.077	.079	.080	.079	.079	.077	.476
.501	.073		.072	.072	.074	.073	.074		.073	.501
.530	-.035	-.035	-.035	-.035	-.035		-.036	-.033	-.034	.530
.548							-.036			.548
.566							-.032			.566
.584	-.028	-.028	-.028	-.030	-.033	-.032	-.029	-.030	-.028	.584
.602							-.026			.602
.620							-.025			.620
.638	-.024	-.027		-.024	-.022		-.021		-.025	.638
.655							-.019			.655
.673							-.019			.673
.691	-.020	-.024	-.022		-.023	-.021		-.018	-.020	.691
.709							-.015			.709
.727							-.014			.727
.745	-.016	-.015		-.016	-.016		-.015		-.013	.745
.763							-.015			.763
.781							-.017			.781
.799							-.015			.799
.817	-.011	-.014	-.015	-.016	-.014	-.013	-.011	-.010	-.007	.817
.834							-.012			.834
.870							-.009			.870
.888							-.008			.888
.921	-.123									.921
.924	-.007	-.013		-.015			-.006			.924
.947							-.008			.947
.964							-.005			.964
.981	.012	-.008	-.009		-.008	-.007	-.008	-.004	-.004	.981
.984					-.011				-.009	.984
.998							-.013			.998
1.000	-.127									1.000

Nose rake			Base rake		
Orifice station, y, in.	Cp top	Cp side	Orifice station, y, in.	Cp top	Cp side
.010	.855		.031	.287	.313
.030	1.498		.094	.493	.501
.050	1.580		.156	.621	.644
.070	1.456		.219	.750	.769
.090	1.366		.281	.848	.875
.110	1.373		.344	.963	.989
.130	1.378		.406	1.072	1.113
.150	1.386		.469	1.178	1.215
.170	1.377		.750	1.417	
.190	1.315		1.000	1.484	
			1.250	1.537	
			1.500	1.569	

[redacted]

TABLE 12. - PRESSURE COEFFICIENTS FOR AN INTERCONTINENTAL BALLISTIC MISSILE FOR NOSE III WITH FIXED TRANSITION AT M = 2.29 - Continued

(e) $\alpha = 3.0^{\circ}$

Model station, $\frac{x}{l}$	Cp for meridian angle, θ, deg –									Model station, $\frac{x}{l}$
	0	90	105	120	150	165	180	225	270	
.039							1.677			.039
.040							1.650			.040
.041							1.495			.041
.044							1.115			.044
.049							.574			.049
.055							.457			.055
.060	.357	.452	.492	.502	.543	.537	.542	.527		.060
.075	.009	.059	.072	.085	.108	.106	.107	.089		.075
.085	.025	.072	.084	.097	.117	.123	.122	.107	.068	.085
.096	.048									.096
.126		.093	.104	.115	.138	.142	.142	.124	.093	.126
.143							-.046			.143
.154	-.086	-.066	-.060	-.052	-.041		-.035	-.048	-.068	.154
.171							-.033			.171
.189							-.030			.189
.206	-.063	-.052	-.047	-.043	-.031	-.028	-.027	-.035	-.052	.206
.223							-.025			.223
.241							-.025			.241
.258	-.045	-.044	-.039	-.035	-.025	-.023	-.024	-.031	-.040	.258
.275							-.023			.275
.293							-.022			.293
.310	-.032	-.040	-.037	-.032	-.024	-.021	-.018	-.026	-.036	.310
.327							-.018			.327
.344							-.017			.344
.362	-.023	-.037	-.034	-.031	-.023	-.019	-.017	-.022	-.032	.362
.379							-.017			.379
.396	-.020	-.033	-.034	-.030	-.021	-.018	-.014	-.023	-.029	.396
.408							-.017			.408
.426	.079	.071	.077	.079	.090	.097	.097	.088	.073	.426
.451	.075	.071	.075	.080	.093	.095	.099	.087	.072	.451
.476	.067	.068	.070	.077	.090	.093	.096	.086	.070	.476
.501	.060		.069	.073	.085	.087	.090		.065	.501
.530	-.039	-.042	-.040	-.039	-.035		-.029	-.036	-.041	.530
.548							-.023			.548
.566							-.018			.566
.584	-.032	-.038	-.037	-.033	-.025	-.022	-.018	-.025	-.036	.584
.602							-.015			.602
.620							-.015			.620
.638	-.025	-.033		-.023	-.018		-.013		-.029	.638
.655							-.010			.655
.673							-.010			.673
.691	-.021	-.030	-.028		-.019	-.017		-.017	-.027	.691
.709							-.012			.709
.727							-.011			.727
.745	-.017	-.023		-.023	-.017		-.010		-.021	.745
.763							-.009			.763
.781							-.014			.781
.799							-.011			.799
.817	-.010	-.024	-.023	-.022	-.015	-.010	-.006	-.014	-.016	.817
.834							-.009			.834
.870							-.005			.870
.888							-.004			.888
.921	-.127									.921
.924	-.008	-.020		-.023			-.003			.924
.947							-.002			.947
.964							.000			.964
.981	.009	-.017	-.017		-.007	-.006	-.005	-.004	-.012	.981
.984					-.013				-.017	.984
.998							-.007			.998
1.000	-.132									1.000

Nose rake			Base rake		
Orifice station, y, in.	Cp top	Cp side	Orifice station, y, in.	Cp top	Cp side
.010	.760		.031	.213	.359
.030	1.432		.094	.333	.645
.050	1.522		.156	.428	.855
.070	1.369		.219	.518	1.012
.090	1.292		.281	.593	1.163
.110	1.287		.344	.661	1.309
.130	1.289		.406	.725	1.397
.150	1.295		.469	.785	1.454
.170	1.290		.750	1.005	
.190	1.229		1.000	1.199	
			1.250	1.285	
			1.500	1.345	

[redacted]

TABLE 12. - PRESSURE COEFFICIENTS FOR AN INTERCONTINENTAL BALLISTIC MISSILE FOR NOSE III WITH FIXED TRANSITION AT M = 2.29 - Continued

(f) $\alpha = 6.3^{\circ}$

Model station, $\frac{x}{l}$	Cp for meridian angle, θ, deg –									Model station, $\frac{x}{l}$
	0	90	105	120	150	165	180	225	270	
.039							1.662			.039
.040							1.676			.040
.041							1.558			.041
.044							1.194			.044
.049							.670			.049
.055							.567			.055
.060	.264	.457	.527	.564	.647	.657	.673	.612		.060
.075	-.030	.060	.084	.110	.156	.160	.162	.125		.075
.085	-.016	.070	.095	.124	.167	.181	.182	.147	.068	.085
.096	.007									.096
.126		.087	.113	.139	.187	.200	.202	.163	.088	.126
.143							-.012			.143
.154	-.104	-.071	-.056	-.040	-.013		-.000	-.026	-.072	.154
.171							-.001			.171
.189							.000			.189
.206	-.071	-.065	-.051	-.038	-.009	-.002	.000	-.022	-.064	.206
.223							.003			.223
.241							.002			.241
.258	-.045	-.063	-.052	-.036	-.006	.001	.001	-.021	-.059	.258
.275							.001			.275
.293							-.000			.293
.310	-.029	-.067	-.056	-.039	-.010	-.001	.002	-.022	-.063	.310
.327							.001			.327
.344							.000			.344
.362	-.019	-.070	-.059	-.042	-.013	-.003	.000	-.023	-.064	.362
.379							-.000			.379
.396	-.017	-.067	-.062	-.046	-.013	-.004	.001	-.027	-.062	.396
.408							-.001			.408
.426	.081	.030	.042	.057	.103	.121	.125	.085	.033	.426
.451	.072	.038	.043	.061	.106	.118	.126	.085	.039	.451
.476	.060	.040	.042	.058	.100	.113	.118	.084	.042	.476
.501	.052		.046	.056	.093	.106	.115		.040	.501
.530	-.050	-.062	-.060	-.052	-.022		-.007	-.034	-.061	.530
.548							-.002			.548
.566							.000			.566
.584	-.035	-.057	-.049	-.038	-.015	-.007	-.002	-.025	-.055	.584
.602							-.000			.602
.620							.000			.620
.638	-.027	-.055		-.034	-.010		.000		-.052	.638
.655							-.000			.655
.673							-.000			.673
.691	-.021	-.055	-.050		-.017	-.006		-.021	-.052	.691
.709							.000			.709
.727							.001			.727
.745	-.016	-.050		-.039	-.011		.003		-.050	.745
.763							.003			.763
.781							-.001			.781
.799							.000			.799
.817	-.010	-.050	-.049	-.039	-.010	.000	.006	-.019	-.045	.817
.834							.003			.834
.870							.007			.870
.888							.010			.888
.921	-.148									.921
.924	-.009	-.044		-.040			.007			.924
.947							.005			.947
.964							.008			.964
.981	.012	-.038	-.043		-.009	.000	.004	-.013	-.037	.981
.984					-.012				-.042	.984
.998							.003			.998
1.000	-.149									1.000

Nose rake			Base rake		
Orifice station, y, in.	Cp top	Cp side	Orifice station, y, in.	Cp top	Cp side
.010	.648		.031	.456	.366
.030	1.347		.094	.980	.848
.050	1.445		.156	1.014	1.142
.070	1.285		.219	1.048	1.312
.090	1.207		.281	1.063	1.414
.110	1.195		.344	1.076	1.458
.130	1.193		.406	1.091	1.485
.150	1.195		.469	1.107	1.493
.170	1.198		.750	1.158	
.190	1.135		1.000	1.193	
			1.250	1.220	
			1.500	1.221	

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TABLE 12. - PRESSURE COEFFICIENTS FOR AN INTERCONTINENTAL BALLISTIC MISSILE FOR NOSE III WITH FIXED TRANSITION AT M = 2.29 - Concluded

(g) $\alpha = 10.1^{\circ}$

Model station, $\frac{x}{l}$	Cp for meridian angle, θ, deg – 0	90	105	120	150	165	180	225	270	Model station, $\frac{x}{l}$
.039							1.639			.039
.040							1.684			.040
.041							1.604			.041
.044							1.294			.044
.049							.792			.049
.055							.746			.055
.060	.160	.473	.567	.632	.768	.790	.805	.706		.060
.075	-.073	.057	.094	.136	.215	.229	.235	.170		.075
.085	-.059	.065	.104	.155	.234	.258	.264	.198	.065	.085
.096	-.032									.096
.126		.076	.118	.166	.251	.272	.280	.209	.079	.126
.143							.031			.143
.154	-.120	-.080	-.055	-.026	.021		.045	-.002	-.079	.154
.171							.042			.171
.189							.045			.189
.206	-.074	-.086	-.059	-.031	.024	.039	.046	-.000	-.083	.206
.223							.047			.223
.241							.044			.241
.258	-.045	-.096	-.071	-.036	.021	.038	.042	-.004	-.089	.258
.275							.040			.275
.293							.038			.293
.310	-.028	-.110	-.080	-.046	.013	.032	.041	-.009	-.103	.310
.327							.039			.327
.344							.038			.344
.362	-.018	-.122	-.090	-.053	.008	.029	.038	-.015	-.115	.362
.379							.035			.379
.396	-.014	-.127	-.097	-.060	.006	.027	.038	-.020	-.122	.396
.408							.033			.408
.426	.095	-.063	-.011	.036	.132	.167	.177	.096	-.058	.426
.451	.091	-.058	-.015	.036	.134	.161	.176	.094	-.057	.451
.476	.065	-.051	-.017	.036	.132	.163	.176	.096	-.052	.476
.501	.050		-.014	.036	.132	.160	.174		-.044	.501
.530	-.052	-.108	-.101	-.067	.000		.029	-.028	-.109	.530
.548							.031			.548
.566							.033			.566
.584	-.044	-.097	-.099	-.065	.001	.020	.031	-.025	-.096	.584
.602							.032			.602
.620							.031			.620
.638	-.030	-.095		-.065	.001		.032		-.095	.638
.655							.032			.655
.673							.030			.673
.691	-.028	-.098	-.094		-.006	.016		-.029	-.097	.691
.709							.024			.709
.727							.027			.727
.745	-.027	-.099		-.075	-.002		.031		-.098	.745
.763							.032			.763
.781							.027			.781
.799							.026			.799
.817	-.029	-.102	-.094	-.064	-.002	.022	.034	-.028	-.095	.817
.834							.031			.834
.870							.031			.870
.888							.028			.888
.921	-.167									.921
.924	-.032	-.073		-.073			.030			.924
.947							.028			.947
.964							.030			.964
.981	-.008	-.060	-.102		-.000	.020	.027	-.024	-.070	.981
.984					-.005				-.083	.984
.998							.028			.998
1.000	-.171									1.000

Nose rake			Base rake		
Orifice station, y, in.	Cp top	Cp side	Orifice station, y, in.	Cp top	Cp side
.010	.390		.031	.506	.235
.030	1.122		.094	1.127	.787
.050	1.361		.156	1.062	1.336
.070	1.227		.219	1.101	1.402
.090	1.115		.281	1.108	1.434
.110	1.089		.344	1.115	1.458
.130	1.095		.406	1.123	1.461
.150	1.096		.469	1.132	1.454
.170	1.087		.750	1.168	
.190	1.031		1.000	1.207	
			1.250	1.256	
			1.500	1.289	

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TABLE 13. - PRESSURE COEFFICIENTS FOR AN INTERCONTINENTAL BALLISTIC MISSILE FOR NOSE III WITH FIXED TRANSITION AT M = 2.98

(a) $\alpha = -10.1^{\circ}$

Model station, $\frac{x}{l}$	Cp for meridian angle, θ, deg –									Model station, $\frac{x}{l}$
	0	90	105	120	150	165	180	225	270	
.039							1.717			.039
.040							1.545			.040
.041							1.271			.041
.044							.791			.044
.049							.260			.049
.055							.177			.055
.060	.758	.426	.359	.300	.216	.200	.190	.252		.060
.075	.253	.090	.060	.031	-.000	-.014	-.015	.009		.075
.085	.263	.090	.062	.034	.000	-.008	-.011	.016	.091	.085
.096	.278									.096
.126		.081	.052	.028	.005	.003	.002	.015	.083	.126
.143							-.075			.143
.154	.061	-.034	-.050	-.063	-.072		-.071	-.070	-.034	.154
.171							-.066			.171
.189							-.057			.189
.206	.054	-.046	-.060	-.067	-.059	-.052	-.050	-.068	-.045	.206
.223							-.042			.223
.241							-.036			.241
.258	.049	-.052	-.067	-.074	-.047	-.036	-.032	-.067	-.048	.258
.275							-.029			.275
.293							-.026			.293
.310	.046	-.060	-.076	-.080	-.041	-.030	-.023	-.055	-.062	.310
.327							-.022			.327
.344							-.019			.344
.362	.043	-.067	-.083	-.067	-.042	-.029	-.017	-.050	-.069	.362
.379							-.015			.379
.396	.041	-.072	-.086	-.058	-.045	-.030	-.013	-.051	-.073	.396
.408							-.012			.408
.426	.155	-.029	-.027	-.013	-.010	.022	.057	-.013	-.029	.426
.451	.160	-.023	-.036	-.001	-.007	.019	.064	-.003	-.023	.451
.476	.165	-.024	-.035	.001	-.014	.017	.049	.001	-.020	.476
.501	.168		-.033	.002	-.019	.015	.038		-.019	.501
.530	.047	-.073	-.074	-.045	-.062		-.030	-.037	-.073	.530
.548							-.031			.548
.566							-.031			.566
.584	.045	-.076	-.063	-.048	-.063	-.037	-.030	-.044	-.075	.584
.602							-.025			.602
.620							-.025			.620
.638	.043	-.078		-.050	-.047		-.023		-.080	.638
.655							-.022			.655
.673							-.021			.673
.691	.042	-.081	-.059		-.038	-.032		-.051	-.083	.691
.709							-.021			.709
.727							-.021			.727
.745	.042	-.071		-.044	-.038		-.021		-.085	.745
.763							-.022			.763
.781							-.025			.781
.799							-.025			.799
.817	.041	-.077	-.045	-.039	-.044	-.034	-.024	-.042	-.085	.817
.834							-.025			.834
.870							-.024			.870
.888							-.023			.888
.921	-.111									.921
.924	.040	-.051		-.041			-.023			.924
.947							-.024			.947
.964							-.023			.964
.981	.068	-.042	-.035		-.046	-.043	-.025	-.044	-.045	.981
.984					-.048				-.056	.984
.998							-.025			.998
1.000	-.113									1.000

Nose rake			Base rake		
Orifice station, y, in.	C_p top	C_p side	Orifice station, y, in.	C_p top	C_p side
.010	1.261		.031	.716	.118
.030	1.697		.094	1.690	.378
.050	1.775		.156	1.902	.895
.070	1.718		.219	1.963	1.144
.090	1.692		.281	1.966	1.318
.110	1.711		.344	1.958	1.384
.130	1.739		.406	1.941	1.417
.150	1.760		.469	1.941	1.441
.170	1.793		.750	1.947	
.190	1.750		1.000	1.941	
			1.250	1.941	
			1.500	1.923	

[redacted]

TABLE 13. - PRESSURE COEFFICIENTS FOR AN INTERCONTINENTAL BALLISTIC MISSILE FOR NOSE III WITH FIXED TRANSITION AT M = 2.98 - Continued

(b) $\alpha = -6.3^{\circ}$

Model station, $\frac{x}{l}$	Cp for meridian angle, θ, deg –									Model station, $\frac{x}{l}$
	0	90	105	120	150	165	180	225	270	
.039							1.716			.039
.040							1.598			.040
.041							1.330			.041
.044							.884			.044
.049							.310			.049
.055							.244			.055
.060	.624	.422	.393	.346	.284	.277	.267	.318		.060
.075	.183	.091	.070	.052	.030	.020	.019	.037		.075
.085	.188	.091	.072	.054	.032	.025	.023	.044	.094	.085
.096	.213									.096
.126		.086	.068	.052	.034	.030	.030	.042	.090	.126
.143							-.064			.143
.154	.022	-.032	-.041	-.050	-.059		-.060	-.056	-.031	.154
.171							-.057			.171
.189							-.051			.189
.206	.013	-.035	-.042	-.047	-.047	-.047	-.046	-.048	-.033	.206
.223							-.041			.223
.241							-.037			.241
.258	.013	-.038	-.045	-.047	-.038	-.034	-.033	-.044	-.033	.258
.275							-.029			.275
.293							-.027			.293
.310	.011	-.040	-.046	-.044	-.031	-.026	-.023	-.037	-.040	.310
.327							-.021			.327
.344							-.019			.344
.362	.010	-.044	-.046	-.040	-.024	-.019	-.018	-.030	-.043	.362
.379							-.016			.379
.396	.006	-.045	-.046	-.036	-.021	-.016	-.014	-.027	-.044	.396
.408							-.013			.408
.426	.101	.011	.019	.026	.034	.041	.045	.031	.013	.426
.451	.110	.020	.021	.028	.039	.041	.047	.034	.022	.451
.476	.109	.024	.024	.027	.033	.036	.040	.033	.027	.476
.501	.110		.024	.025	.029	.031	.036		.029	.501
.530	.009	-.041	-.043	-.037	-.026		-.027	-.029	-.038	.530
.548							-.026			.548
.566							-.021			.566
.584	.011	-.041	-.042	-.037	-.027	-.024	-.019	-.028	-.039	.584
.602							-.018			.602
.620							-.016			.620
.638	.010	-.041		-.031	-.021		-.014		-.038	.638
.655							-.014			.655
.673							-.013			.673
.691	.008	-.042	-.039		-.019	-.018		-.022	-.040	.691
.709							-.012			.709
.727							-.010			.727
.745	.010	-.032		-.023	-.017		-.010		-.040	.745
.763							-.010			.763
.781							-.011			.781
.799							-.010			.799
.817	.011	-.038	-.029	-.020	-.016	-.015	-.007	-.017	-.039	.817
.834							-.008			.834
.870							-.006			.870
.888							-.005			.888
.921	-.108									.921
.924	.011	-.034		-.020			-.005			.924
.947							-.006			.947
.964							-.004			.964
.981	.030	-.031	-.021		-.014	-.013	-.005	-.013	-.031	.981
.984					-.015				-.037	.984
.998							-.005			.998
1.000	-.107									1.000

Nose rake			Base rake		
Orifice station, y, in.	Cp top	Cp side	Orifice station, y, in.	Cp top	Cp side
.010	1.085		.031	.535	.271
.030	1.595		.094	1.220	.692
.050	1.647		.156	1.452	.934
.070	1.587		.219	1.644	1.150
.090	1.554		.281	1.684	1.286
.110	1.556		.344	1.698	1.364
.130	1.565		.406	1.715	1.405
.150	1.579		.469	1.729	1.423
.170	1.595		.750	1.746	
.190	1.554		1.000	1.759	
			1.250	1.769	
			1.500	1.762	

[redacted]

TABLE 13. - PRESSURE COEFFICIENTS FOR AN INTERCONTINENTAL BALLISTIC MISSILE FOR NOSE III WITH FIXED TRANSITION AT M = 2.98 - Continued

(c) $\alpha = -3.0^{\circ}$

Model station, $\frac{x}{l}$	Cp for meridian angle, θ, deg –									Model station, $\frac{x}{l}$
	0	90	105	120	150	165	180	225	270	
.039							1.754			.039
.040							1.646			.040
.041							1.423			.041
.044							.979			.044
.049							.395			.049
.055							.320			.055
.060	.520	.421	.410	.388	.355	.350	.342	.377		.060
.075	.131	.092	.081	.072	.062	.055	.055	.065		.075
.085	.135	.092	.083	.075	.064	.060	.059	.072	.094	.085
.096	.166									.096
.126		.090	.081	.071	.062	.059	.060	.068	.093	.126
.143							-.049			.143
.154	-.006	-.029	-.034	-.038	-.045		-.046	-.042	-.028	.154
.171							-.044			.171
.189							-.040			.189
.206	-.007	-.026	-.031	-.034	-.035	-.037	-.038	-.035	-.026	.206
.223							-.035			.223
.241							-.033			.241
.258	-.011	-.026	-.029	-.030	-.030	-.030	-.031	-.030	-.021	.258
.275							-.029			.275
.293							-.027			.293
.310	-.007	-.025	-.027	-.026	-.025	-.024	-.024	-.025	-.024	.310
.327							-.022			.327
.344							-.020			.344
.362	-.008	-.022	-.022	-.021	-.020	-.019	-.019	-.021	-.021	.362
.379							-.017			.379
.396	-.008	-.021	-.022	-.020	-.018	-.015	-.015	-.018	-.020	.396
.408							-.015			.408
.426	.073	.045	.049	.045	.047	.048	.047	.047	.047	.426
.451	.078	.051	.048	.048	.051	.049	.052	.050	.053	.451
.476	.081	.051	.048	.046	.048	.048	.048	.050	.054	.476
.501	.081		.047	.045	.045	.046	.047		.055	.501
.530	-.007	-.020	-.022	-.021	-.019		-.015	-.018	-.018	.530
.548							-.016			.548
.566							-.015			.566
.584	-.006	-.022	-.021	-.020	-.018	-.017	-.014	-.017	-.019	.584
.602							-.013			.602
.620							-.013			.620
.638	-.005	-.020		-.018	-.015		-.012		-.017	.638
.655							-.011			.655
.673							-.012			.673
.691	-.005	-.018	-.017		-.014	-.014		-.015	-.016	.691
.709							-.010			.709
.727							-.010			.727
.745	-.004	-.007		-.012	-.011		-.009		-.015	.745
.763							-.009			.763
.781							-.008			.781
.799							-.007			.799
.817	-.003	-.011	-.011	-.010	-.008	-.007	-.006	-.010	-.014	.817
.834							-.006			.834
.870							-.005			.870
.888							-.003			.888
.921	-.095									.921
.924	-.000	-.010		-.011			-.002			.924
.947							-.003			.947
.964							-.002			.964
.981	.014	-.010	-.009		-.004	-.002	-.002	-.005	-.010	.981
.984					-.006				-.014	.984
.998							-.008			.998
1.000	-.097									1.000

Nose rake			Base rake		
Orifice station, y, in.	Cp top	Cp side	Orifice station, y, in.	Cp top	Cp side
.010	.961		.031	.360	.268
.030	1.487		.094	.748	.501
.050	1.529		.156	.935	.655
.070	1.481		.219	1.201	.782
.090	1.452		.281	1.406	.930
.110	1.453		.344	1.513	1.085
.130	1.437		.406	1.550	1.218
.150	1.449		.469	1.589	1.303
.170	1.452		.750	1.582	
.190	1.399		1.000	1.633	
			1.250	1.659	
			1.500	1.675	

[redacted]

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TABLE 13. - PRESSURE COEFFICIENTS FOR AN INTERCONTINENTAL BALLISTIC MISSILE FOR NOSE III WITH FIXED TRANSITION AT M = 2.98 - Continued

(d) $\alpha = 0^{\circ}$

Model station, $\frac{x}{l}$	Cp for meridian angle, θ, deg –									Model station, $\frac{x}{l}$
	0	90	105	120	150	165	180	225	270	
.039							1.760			.039
.040							1.698			.040
.041							1.502			.041
.044							1.078			.044
.049							.488			.049
.055							.387			.055
.060	.424	.424	.438	.428	.437	.424	.420	.432		.060
.075	.089	.090	.091	.091	.095	.092	.093	.093		.075
.085	.093	.092	.094	.095	.096	.096	.097	.098	.095	.085
.096	.120									.096
.126		.091	.091	.091	.094	.092	.094	.094	.094	.126
.143							-.031			.143
.154	-.027	-.028	-.028	-.029	-.029		-.027	-.028	-.028	.154
.171							-.027			.171
.189							-.026			.189
.206	-.025	-.026	-.026	-.026	-.024	-.026	-.026	-.024	-.024	.206
.223							-.024			.223
.241							-.024			.241
.258	-.022	-.021	-.022	-.022	-.022	-.022	-.023	-.021	-.017	.258
.275							-.022			.275
.293							-.021			.293
.310	-.020	-.019	-.020	-.019	-.020	-.020	-.020	-.019	-.018	.310
.327							-.019			.327
.344							-.017			.344
.362	-.016	-.016	-.016	-.016	-.017	-.017	-.016	-.015	-.015	.362
.379							-.017			.379
.396	-.013	-.014	-.016	-.015	-.015	-.014	-.014	-.013	-.012	.396
.408							-.014			.408
.426	.058	.053	.059	.054	.054	.055	.054	.054	.056	.426
.451	.061	.057	.057	.058	.061	.059	.060	.060	.060	.451
.476	.061	.057	.057	.058	.059	.059	.060	.061	.061	.476
.501	.061		.057	.056	.058	.058	.060		.060	.501
.530	-.012	-.014	-.015	-.014	-.014		-.012	-.011	-.012	.530
.548							-.012			.548
.566							-.011			.566
.584	-.012	-.015	-.015	-.014	-.015	-.015	-.012	-.012	-.011	.584
.602							-.012			.602
.620							-.013			.620
.638	-.012	-.013		-.012	-.014		-.012		-.011	.638
.655							-.011			.655
.673							-.010			.673
.691	-.011	-.012	-.012		-.013	-.013		-.011	-.012	.691
.709							-.009			.709
.727							-.008			.727
.745	-.008	-.002		-.008	-.010		-.007		-.009	.745
.763							-.007			.763
.781							-.008			.781
.799							-.007			.799
.817	-.006	-.006	-.006	-.006	-.007	-.006	-.005	-.006	-.007	.817
.834							-.005			.834
.870							-.006			.870
.888							-.005			.888
.921	-.087									.921
.924	-.002	-.004		-.007			-.003			.924
.947							-.002			.947
.964							-.002			.964
.981	.007	-.003	-.004		-.002	-.002	-.003	-.002	-.004	.981
.984					-.006				-.008	.984
.998							-.006			.998
1.000	-.090									1.000

Nose rake			Base rake		
Orifice station, y, in.	Cp top	Cp side	Orifice station, y, in.	Cp top	Cp side
.010	.877		.031	.229	.233
.030	1.409		.094	.400	.397
.050	1.444		.156	.496	.507
.070	1.382		.219	.578	.605
.090	1.349		.281	.659	.687
.110	1.345		.344	.767	.796
.130	1.337		.406	.863	.915
.150	1.333		.469	.971	.986
.170	1.340		.750	1.319	
.190	1.281		1.000	1.416	
			1.250	1.530	
			1.500	1.587	

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TABLE 13. - PRESSURE COEFFICIENTS FOR AN INTERCONTINENTAL BALLISTIC MISSILE FOR NOSE III WITH FIXED TRANSITION AT M = 2.98 - Continued

(e) $\alpha = 3.0^{\circ}$

Model station, $\frac{x}{l}$	Cp for meridian angle, θ, deg –									Model station, $\frac{x}{l}$
	0	90	105	120	150	165	180	225	270	
.039							1.750			.039
.040							1.711			.040
.041							1.557			.041
.044							1.160			.044
.049							.599			.049
.055							.459			.055
.060	.338	.423	.463	.472	.515	.506	.507	.495		.060
.075	.052	.090	.101	.113	.133	.134	.136	.123		.075
.085	.056	.092	.104	.115	.133	.136	.139	.128	.095	.085
.096	.083									.096
.126		.090	.099	.109	.129	.132	.135	.120	.094	.126
.143							-.009			.143
.154	-.045	-.029	-.025	-.019	-.010		-.005	-.014	-.029	.154
.171							-.007			.171
.189							-.007			.189
.206	-.038	-.029	-.024	-.019	-.010	-.008	-.008	-.013	-.027	.206
.223							-.007			.223
.241							-.009			.241
.258	-.031	-.027	-.024	-.021	-.012	-.009	-.009	-.015	-.021	.258
.275							-.009			.275
.293							-.008			.293
.310	-.025	-.026	-.023	-.019	-.012	-.008	-.007	-.013	-.025	.310
.327							-.007			.327
.344							-.007			.344
.362	-.019	-.024	-.021	-.018	-.012	-.009	-.008	-.013	-.022	.362
.379							-.009			.379
.396	-.016	-.022	-.022	-.019	-.011	-.009	-.006	-.013	-.020	.396
.408							-.008			.408
.426	.048	.042	.052	.052	.063	.069	.070	.059	.045	.426
.451	.051	.049	.052	.058	.073	.075	.077	.067	.052	.451
.476	.048	.049	.053	.059	.073	.078	.079	.071	.053	.476
.501	.046		.054	.059	.074	.078	.080		.054	.501
.530	-.017	-.021	-.020	-.017	-.010		-.005	-.010	-.019	.530
.548							-.006			.548
.566							-.005			.566
.584	-.015	-.023	-.021	-.019	-.013	-.010	-.007	-.012	-.020	.584
.602							-.005			.602
.620							-.005			.620
.638	-.014	-.021		-.015	-.010		-.004		-.018	.638
.655							-.004			.655
.673							-.004			.673
.691	-.012	-.019	-.018		-.010	-.008		-.010	-.018	.691
.709							-.004			.709
.727							-.003			.727
.745	-.010	-.010		-.013	-.008		-.003		-.016	.745
.763							-.003			.763
.781							-.005			.781
.799							-.006			.799
.817	-.007	-.013	-.013	-.011	-.009	-.006	-.004	-.010	-.014	.817
.834							-.004			.834
.870							-.000			.870
.888							.000			.888
.921	-.092									.921
.924	-.004	-.013		-.010			.000			.924
.947							-.000			.947
.964							.001			.964
.981	.005	-.010	-.010		-.001	.000	-.000	-.004	-.010	.981
.984					-.003				-.016	.984
.998							-.001			.998
1.000	-.095									1.000

Nose rake			Base rake		
Orifice station, y, in.	Cp top	Cp side	Orifice station, y, in.	Cp top	Cp side
.010	.543		.031	.173	.267
.030	1.215		.094	.295	.524
.050	1.360		.156	.362	.684
.070	1.290		.219	.419	.830
.090	1.246		.281	.468	1.001
.110	1.236		.344	.501	1.146
.130	1.222		.406	.534	1.282
.150	1.216		.469	.585	1.363
.170	1.211		.750	.758	
.190	1.172		1.000	.933	
			1.250	1.077	
			1.500	1.162	

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TABLE 13. - PRESSURE COEFFICIENTS FOR AN INTERCONTINENTAL BALLISTIC MISSILE FOR NOSE III WITH FIXED TRANSITION AT M = 2.98 - Continued

(f) $\alpha = 6.3^{\circ}$

Model station, $\frac{x}{l}$	Cp for meridian angle, θ, deg –									Model station, $\frac{x}{l}$
	0	90	105	120	150	165	180	225	270	
.039							1.742			.039
.040							1.755			.040
.041							1.611			.041
.044							1.254			.044
.049							.702			.049
.055							.557			.055
.060	.264	.426	.485	.523	.601	.609	.614	.572		.060
.075	.017	.090	.114	.137	.179	.186	.190	.158		.075
.085	.021	.092	.114	.140	.178	.189	.194	.165	.096	.085
.096	.052									.096
.126		.087	.108	.130	.172	.182	.187	.154	.092	.126
.143							.021			.143
.154	-.059	-.033	-.021	-.007	.014		.024	.004	-.031	.154
.171							.020			.171
.189							.016			.189
.206	-.046	-.036	-.026	-.014	.006	.012	.015	-.001	-.034	.206
.223							.015			.223
.241							.015			.241
.258	-.034	-.040	-.030	-.017	.006	.012	.014	-.003	-.033	.258
.275							.013			.275
.293							.012			.293
.310	-.024	-.043	-.033	-.021	.001	.009	.013	-.005	-.041	.310
.327							.011			.327
.344							.011			.344
.362	-.017	-.046	-.036	-.023	-.000	.007	.010	-.007	-.044	.362
.379							.009			.379
.396	-.015	-.048	-.039	-.026	-.001	.006	.010	-.009	-.047	.396
.408							.009			.408
.426	.046	.005	.029	.042	.082	.097	.100	.069	.009	.426
.451	.048	.016	.030	.051	.095	.105	.113	.078	.019	.451
.476	.042	.019	.031	.052	.093	.106	.113	.080	.024	.476
.501	.037		.032	.051	.094	.107	.114		.026	.501
.530	-.026	-.043	-.038	-.027	-.000		.013	-.009	-.041	.530
.548							.013			.548
.566							.014			.566
.584	-.020	-.043	-.037	-.026	-.001	.006	.013	-.008	-.040	.584
.602							.013			.602
.620							.012			.620
.638	-.017	-.042		-.025	-.002		.013		-.040	.638
.655							.013			.655
.673							.012			.673
.691	-.014	-.044	-.037		-.004	.004		-.009	-.042	.691
.709							.011			.709
.727							.010			.727
.745	-.012	-.033		-.026	-.003		.009		-.041	.745
.763							.008			.763
.781							.007			.781
.799							.009			.799
.817	-.009	-.039	-.037	-.028	-.001	.009	.014	-.011	-.040	.817
.834							.013			.834
.870							.014			.870
.888							.014			.888
.921	-.104									.921
.924	-.008	-.034		-.026			.012			.924
.947							.011			.947
.964							.013			.964
.981	.005	-.033	-.035		-.000	.008	.011	-.011	-.034	.981
.984					-.002				-.039	.984
.998							.011			.998
1.000	-.106									1.000

Nose rake			Base rake		
Orifice station, y, in.	C_p top	C_p side	Orifice station, y, in.	C_p top	C_p side
.010	.370		.031	.369	.268
.030	1.037		.094	.822	.705
.050	1.209		.156	.807	.935
.070	1.183		.219	.838	1.166
.090	1.155		.281	.843	1.308
.110	1.155		.344	.857	1.357
.130	1.145		.406	.866	1.392
.150	1.132		.469	.875	1.427
.170	1.120		.750	.906	
.190	1.065		1.000	.952	
			1.250	.986	
			1.500	1.008	

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TABLE 13. - PRESSURE COEFFICIENTS FOR AN INTERCONTINENTAL BALLISTIC MISSILE FOR NOSE III WITH FIXED TRANSITION AT M = 2.98 - Concluded

(g) $\alpha = 10.1^{\circ}$

Model station, $\frac{x}{l}$	Cp for meridian angle, θ, deg –									Model station, $\frac{x}{l}$
	0	90	105	120	150	165	180	225	270	
.039							1.705			.039
.040							1.749			.040
.041							1.666			.041
.044							1.357			.044
.049							.829			.049
.055							.701			.055
.060	.189	.430	.516	.585	.714	.739	.754	.661		.060
.075	-.017	.092	.126	.166	.239	.254	.261	.202		.075
.085	-.012	.092	.127	.170	.239	.260	.267	.213	.095	.085
.096	.015									.096
.126		.081	.118	.159	.235	.255	.264	.201	.086	.126
.143							.062			.143
.154	-.071	-.034	-.015	.007	.046		.065	.027	-.034	.154
.171							.057			.171
.189							.058			.189
.206	-.050	-.046	-.026	-.004	.040	.053	.058	.020	-.045	.206
.223							.057			.223
.241							.054			.241
.258	-.032	-.055	-.035	-.010	.035	.048	.052	.015	-.048	.258
.275							.050			.275
.293							.048			.293
.310	-.023	-.064	-.042	-.017	.028	.043	.049	.008	-.062	.310
.327							.048			.327
.344							.047			.344
.362	-.017	-.072	-.049	-.021	.024	.040	.046	.005	-.069	.362
.379							.045			.379
.396	-.014	-.075	-.053	-.026	.023	.039	.046	.003	-.073	.396
.408							.045			.408
.426	.054	-.034	.009	.044	.123	.152	.161	.094	-.030	.426
.451	.065	-.027	.008	.049	.132	.155	.167	.098	-.023	.451
.476	.050	-.027	.009	.051	.134	.161	.171	.105	-.020	.476
.501	.040		.011	.052	.135	.160	.173		-.018	.501
.530	-.028	-.077	-.053	-.026	.026		.049	.006	-.073	.530
.548							.048			.548
.566							.049			.566
.584	-.030	-.080	-.055	-.029	.021	.038	.046	.004	-.077	.584
.602							.046			.602
.620							.045			.620
.638	-.025	-.082		-.029	.020		.046		-.081	.638
.655							.046			.655
.673							.045			.673
.691	-.024	-.085	-.060		.017	.035		.001	-.084	.691
.709							.044			.709
.727							.045			.727
.745	-.024	-.074		-.033	.020		.046		-.087	.745
.763							.044			.763
.781							.041			.781
.799							.041			.799
.817	-.027	-.077	-.063	-.035	.019	.038	.046	-.003	-.084	.817
.834							.042			.834
.870							.045			.870
.888							.043			.888
.921	-.114									.921
.924	-.025	-.049		-.039			.042			.924
.947							.037			.947
.964							.042			.964
.981	-.012	-.043	-.070		.017	.036	.042	-.008	-.047	.981
.984					.016				-.057	.984
.998							.042			.998
1.000	-.116									1.000

Nose rake			Base rake		
Orifice station, y, in.	Cp top	Cp side	Orifice station, y, in.	Cp top	Cp side
.010	.238		.031	.403	.100
.030	.852		.094	.905	.368
.050	1.076		.156	.830	.904
.070	1.080		.219	.854	1.167
.090	1.051		.281	.872	1.308
.110	1.038		.344	.873	1.367
.130	1.034		.406	.873	1.381
.150	1.022		.469	.875	1.391
.170	1.005		.750	.893	
.190	.953		1.000	.918	
			1.250	.964	
			1.500	1.030	

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TABLE 14. - PRESSURE COEFFICIENTS FOR AN INTERCONTINENTAL BALLISTIC MISSILE FOR NOSE III WITH FIXED TRANSITION AT M = 3.96

(a) $\alpha = -10.1^{\circ}$

Model station, $\frac{x}{l}$	Cp for meridian angle, θ, deg –									Model station, $\frac{x}{l}$
	0	90	105	120	150	165	180	225	270	
.039							1.733			.039
.040							1.565			.040
.041							1.275			.041
.044							.804			.044
.049							.283			.049
.055							.193			.055
.060	.720	.404	.353	.298	.228	.210	.203	.255		.060
.075	.266	.113	.086	.060	.031	.021	.018	.039		.075
.085	.263	.107	.081	.056	.029	.020	.019	.040	.104	.085
.096	.295									.096
.126		.080	.059	.040	.020	.016	.015	.026	.080	.126
.143							-.034			.143
.154	.073	-.005	-.019	-.027	-.034		-.033	-.032	-.006	.154
.171							-.031			.171
.189							-.029			.189
.206	.060	-.019	-.028	-.034	-.030	-.029	-.027	-.033	-.019	.206
.223							-.025			.223
.241							-.023			.241
.258	.052	-.015	-.034	-.039	-.033	-.029	-.019	-.036	-.012	.258
.275							-.016			.275
.293							-.014			.293
.310	.046	-.030	-.039	-.040	-.030	-.025	-.012	-.037	-.032	.310
.327							-.010			.327
.344							-.010			.344
.362	.045	-.035	-.041	-.039	-.030	-.020	-.010	-.038	-.037	.362
.379							-.010			.379
.396	.045	-.037	-.042	-.038	-.032	-.021	-.010	-.039	-.038	.396
.408							-.010			.408
.426	.133	-.013	-.000	-.022	-.018	.012	.023	-.022	-.016	.426
.451	.147	-.004	-.023	-.013	-.011	.006	.031	-.012	-.006	.451
.476	.156	-.003	-.022	-.011	-.020	.005	.027	-.006	-.004	.476
.501	.161		-.021	-.012	-.016	.004	.019		-.003	.501
.530	.057	-.036	-.041	-.037	-.030		-.019	-.027	-.036	.530
.548							-.021			.548
.566							-.021			.566
.584	.049	-.039	-.040	-.039	-.029	-.025	-.023	-.034	-.039	.584
.602							-.020			.602
.620							-.021			.620
.638	.046	-.040		-.033	-.025		-.022		-.040	.638
.655							-.022			.655
.673							-.022			.673
.691	.046	-.042	-.039		-.028	-.025		-.038	-.042	.691
.709							-.021			.709
.727							-.021			.727
.745	.045	-.018		-.034	-.033		-.021		-.043	.745
.763							-.021			.763
.781							-.022			.781
.799							-.022			.799
.817	.045	-.041	-.034	-.032	-.034	-.027	-.022	-.034	-.043	.817
.834							-.021			.834
.870							-.022			.870
.888							-.022			.888
.921	-.060									.921
.924	.043	-.038		-.028			-.022			.924
.947							-.023			.947
.964							-.021			.964
.981	.061	-.033	-.027		-.034	-.033	-.023	-.033	-.039	.981
.984					-.035				-.041	.984
.998							-.024			.998
1.000	-.061									1.000

Nose rake			Base rake		
Orifice station, y, in.	C_p top	C_p side	Orifice station, y, in.	C_p top	C_p side
.010	1.130		.031	.618	.023
.030	1.557		.094	1.581	.298
.050	1.635		.156	2.001	.607
.070	1.669		.219	2.138	.828
.090	1.715		.281	2.122	.947
.110	1.756		.344	2.142	1.025
.130	1.801		.406	2.158	1.061
.150	1.818		.469	2.178	1.079
.170	1.848		.750	2.162	
.190	1.801		1.000	2.178	
			1.250	2.183	
			1.500	2.167	

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TABLE 14. - PRESSURE COEFFICIENTS FOR AN INTERCONTINENTAL BALLISTIC MISSILE FOR NOSE III WITH FIXED TRANSITION AT M = 3.96 - Continued

(b) $\alpha = -6.3^{\circ}$

Model station, $\frac{x}{l}$	Cp for meridian angle, θ, deg –									Model station, $\frac{x}{l}$
	0	90	105	120	150	165	180	225	270	
.039							1.775			.039
.040							1.636			.040
.041							1.385			.041
.044							.921			.044
.049							.369			.049
.055							.268			.055
.060	.577	.404	.374	.336	.287	.275	.267	.306		.060
.075	.194	.110	.094	.075	.055	.048	.045	.061		.075
.085	.191	.106	.089	.073	.052	.047	.045	.061	.104	.085
.096	.227									.096
.126		.084	.069	.056	.040	.037	.036	.047	.085	.126
.143							-.029			.143
.154	.039	-.007	-.014	-.020	-.028		-.028	-.024	-.006	.154
.171							-.027			.171
.189							-.025			.189
.206	.026	-.014	-.020	-.024	-.025	-.026	-.024	-.026	-.012	.206
.223							-.023			.223
.241							-.022			.241
.258	.022	-.018	-.026	-.029	-.024	-.022	-.021	-.026	-.007	.258
.275							-.018			.275
.293							-.017			.293
.310	.020	-.023	-.029	-.030	-.023	-.019	-.015	-.025	-.021	.310
.327							-.014			.327
.344							-.013			.344
.362	.017	-.026	-.031	-.031	-.019	-.015	-.012	-.024	-.026	.362
.379							-.010			.379
.396	.016	-.029	-.034	-.031	-.017	-.013	-.009	-.024	-.029	.396
.408							-.009			.408
.426	.078	-.001	.014	-.002	.015	.019	.022	.007	-.001	.426
.451	.093	.008	.000	.007	.024	.024	.027	.014	.008	.451
.476	.094	.011	.003	.008	.016	.020	.024	.016	.012	.476
.501	.097		.005	.008	.013	.018	.020		.015	.501
.530	.023	-.026	-.031	-.026	-.017		-.015	-.018	-.027	.530
.548							-.016			.548
.566							-.015			.566
.584	.018	-.032	-.033	-.030	-.020	-.017	-.015	-.020	-.030	.584
.602							-.013			.602
.620							-.012			.620
.638	.016	-.034		-.025	-.018		-.011		-.031	.638
.655							-.011			.655
.673							-.011			.673
.691	.015	-.035	-.034		-.017	-.014		-.020	-.033	.691
.709							-.011			.709
.727							-.011			.727
.745	.015	-.012		-.023	-.018		-.011		-.034	.745
.763							-.011			.763
.781							-.011			.781
.799							-.011			.799
.817	.016	-.036	-.026	-.021	-.018	-.014	-.010	-.018	-.034	.817
.834							-.011			.834
.870							-.011			.870
.888							-.010			.888
.921	-.061									.921
.924	.014	-.033		-.018			-.010			.924
.947							-.010			.947
.964							-.011			.964
.981	.026	-.029	-.020		-.019	-.015	-.010	-.015	-.031	.981
.984					-.019				-.034	.984
.998							-.010			.998
1.000	-.062									1.000

Nose rake			Base rake		
Orifice station, y, in.	C_p top	C_p side	Orifice station, y, in.	C_p top	C_p side
.010	.792		.031	.422	.116
.030	1.327		.094	1.029	.388
.050	1.492		.156	1.302	.659
.070	1.530		.219	1.578	.823
.090	1.555		.281	1.689	.959
.110	1.573		.344	1.728	1.071
.130	1.591		.406	1.768	1.132
.150	1.622		.469	1.790	1.183
.170	1.615		.750	1.842	
.190	1.573		1.000	1.868	
			1.250	1.855	
			1.500	1.853	

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TABLE 14. - PRESSURE COEFFICIENTS FOR AN INTERCONTINENTAL BALLISTIC MISSILE FOR NOSE III WITH FIXED TRANSITION AT M = 3.96 - Continued

(c) $\alpha = -3.0^{\circ}$

Model station, $\frac{x}{l}$	Cp for meridian angle, θ, deg – 0	90	105	120	150	165	180	225	270	Model station, $\frac{x}{l}$
.039							1.784			.039
.040							1.684			.040
.041							1.460			.041
.044							1.015			.044
.049							.414			.049
.055							.327			.055
.060	.483	.405	.394	.371	.346	.340	.333	.356		.060
.075	.147	.109	.102	.091	.083	.077	.077	.085		.075
.085	.144	.105	.097	.089	.078	.075	.075	.085	.106	.085
.096	.175									.096
.126		.086	.079	.072	.063	.061	.060	.068	.089	.126
.143							-.018			.143
.154	.015	-.004	-.009	-.011	-.018		-.018	-.014	-.004	.154
.171							-.019			.171
.189							-.018			.189
.206	.007	-.010	-.013	-.015	-.018	-.018	-.018	-.016	-.009	.206
.223							-.017			.223
.241							-.017			.241
.258	.003	-.012	-.016	-.017	-.018	-.017	-.017	-.016	-.001	.258
.275							-.016			.275
.293							-.015			.293
.310	.002	-.014	-.018	-.017	-.016	-.015	-.014	-.015	-.013	.310
.327							-.014			.327
.344							-.013			.344
.362	.000	-.015	-.017	-.016	-.014	-.013	-.012	-.014	-.013	.362
.379							-.011			.379
.396	.000	-.015	-.017	-.016	-.013	-.012	-.010	-.013	-.014	.396
.408							-.010			.408
.426	.048	.019	.037	.021	.023	.024	.023	.024	.021	.426
.451	.058	.027	.027	.027	.035	.029	.030	.029	.029	.451
.476	.062	.031	.028	.027	.028	.028	.030	.029	.033	.476
.501	.065		.028	.027	.026	.026	.029		.035	.501
.530	.007	-.011	-.014	-.014	-.011		-.008	-.010	-.009	.530
.548							-.011			.548
.566							-.009			.566
.584	-.000	-.016	-.016	-.016	-.012	-.011	-.009	-.011	-.013	.584
.602							-.008			.602
.620							-.007			.620
.638	.000	-.018		-.014	-.011		-.007		-.014	.638
.655							-.006			.655
.673							-.007			.673
.691	.000	-.018	-.018		-.011	-.009		-.010	-.014	.691
.709							-.007			.709
.727							-.007			.727
.745	.000	.002		-.013	-.010		-.007		-.013	.745
.763							-.008			.763
.781							-.008			.781
.799							-.008			.799
.817	.001	-.016	-.014	-.011	-.009	-.008	-.007	-.009	-.012	.817
.834							-.007			.834
.870							-.006			.870
.888							-.005			.888
.921	-.060									.921
.924	.000	-.014		-.010			-.005			.924
.947							-.005			.947
.964							-.005			.964
.981	.007	-.012	-.010		-.008	-.006	-.005	-.006	-.009	.981
.984					-.009				-.012	.984
.998							-.009			.998
1.000	-.061									1.000

Nose rake			Base rake		
Orifice station, y, in.	C_p top	C_p side	Orifice station, y, in.	C_p top	C_p side
.010	.647		.031	.256	.149
.030	1.192		.094	.564	.309
.050	1.367		.156	.730	.423
.070	1.389		.219	.960	.546
.090	1.409		.281	1.176	.658
.110	1.429		.344	1.346	.772
.130	1.444		.406	1.416	.902
.150	1.451		.469	1.471	1.016
.170	1.444		.750	1.496	
.190	1.377		1.000	1.567	
			1.250	1.619	
			1.500	1.661	

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TABLE 14. - PRESSURE COEFFICIENTS FOR AN INTERCONTINENTAL BALLISTIC MISSILE FOR NOSE III WITH FIXED TRANSITION AT M = 3.96 - Continued

(d) $\alpha = 0^{\circ}$

Model station, $\frac{x}{l}$	Cp for meridian angle, θ, deg –									Model station, $\frac{x}{l}$
	0	90	105	120	150	165	180	225	270	
.039							1.774			.039
.040							1.729			.040
.041							1.519			.041
.044							1.092			.044
.049							.494			.049
.055							.395			.055
.060	.404	.404	.411	.405	.407	.405	.401	.404		.060
.075	.109	.109	.110	.109	.112	.110	.110	.107		.075
.085	.105	.105	.106	.105	.108	.106	.107	.109	.106	.085
.096	.134									.096
.126		.087	.087	.087	.089	.088	.088	.089	.090	.126
.143							-.003			.143
.154	-.002	-.004	-.005	-.004	-.005		-.003	-.004	-.004	.154
.171							-.006			.171
.189							-.008			.189
.206	-.008	-.009	-.009	-.009	-.009	-.009	-.009	-.009	-.008	.206
.223							-.009			.223
.241							-.009			.241
.258	-.009	-.009	-.010	-.010	-.010	-.010	-.010	-.009	.001	.258
.275							-.010			.275
.293							-.010			.293
.310	-.010	-.011	-.011	-.011	-.011	-.011	-.010	-.011	-.009	.310
.327							-.010			.327
.344							-.010			.344
.362	-.010	-.011	-.010	-.010	-.010	-.010	-.010	-.009	-.009	.362
.379							-.009			.379
.396	-.009	-.009	-.010	-.009	-.009	-.009	-.008	-.009	-.009	.396
.408							-.008			.408
.426	.031	.028	.044	.030	.030	.031	.030	.030	.029	.426
.451	.038	.035	.036	.036	.042	.037	.039	.038	.035	.451
.476	.039	.037	.037	.037	.037	.039	.040	.039	.039	.476
.501	.041		.038	.037	.039	.039	.041		.040	.501
.530	-.003	-.006	-.006	-.005	-.005		-.002	-.003	-.004	.530
.548							-.004			.548
.566							-.004			.566
.584	-.006	-.009	-.009	-.008	-.008	-.008	-.005	-.005	-.006	.584
.602							-.005			.602
.620							-.006			.620
.638	-.008	-.011		-.007	-.009		-.005		-.006	.638
.655							-.006			.655
.673							-.006			.673
.691	-.008	-.011	-.011		-.010	-.009		-.007	-.007	.691
.709							-.006			.709
.727							-.006			.727
.745	-.007	.007		-.009	-.009		-.006		-.006	.745
.763							-.005			.763
.781							-.006			.781
.799							-.006			.799
.817	-.006	-.009	-.008	-.008	-.006	-.007	-.005	-.006	-.005	.817
.834							-.005			.834
.870							-.004			.870
.888							-.004			.888
.921	-.058									.921
.924	-.005	-.008		-.007			-.005			.924
.947							-.004			.947
.964							-.004			.964
.981	-.000	-.004	-.006		-.006	-.005	-.005	-.003	-.002	.981
.984					-.007				-.004	.984
.998							-.007			.998
1.000	-.058									1.000

Nose rake			Base rake		
Orifice station, y, in.	Cp top	Cp side	Orifice station, y, in.	Cp top	Cp side
.010	.491		.031	.138	.124
.030	1.091		.094	.256	.234
.050	1.257		.156	.322	.288
.070	1.279		.219	.393	.353
.090	1.290		.281	.462	.415
.110	1.300		.344	.534	.494
.130	1.295		.406	.614	.572
.150	1.291		.469	.691	.659
.170	1.279		.750	1.018	
.190	1.214		1.000	1.194	
			1.250	1.351	
			1.500	1.465	

[redacted]

TABLE 14. - PRESSURE COEFFICIENTS FOR AN INTERCONTINENTAL BALLISTIC MISSILE FOR NOSE III WITH FIXED TRANSITION AT M = 3.96 - Continued

(e) $\alpha = 3.0^{\circ}$

Model station, $\frac{x}{l}$	Cp for meridian angle, θ, deg –									Model station, $\frac{x}{l}$
	0	90	105	120	150	165	180	225	270	
.039							1.771			.039
.040							1.744			.040
.041							1.570			.041
.044							1.169			.044
.049							.579			.049
.055							.460			.055
.060	.335	.402	.426	.441	.476	.477	.477	.462		.060
.075	.076	.109	.119	.127	.144	.147	.148	.136		.075
.085	.076	.106	.114	.125	.139	.142	.145	.135	.107	.085
.096	.100									.096
.126		.086	.094	.103	.117	.120	.122	.113	.091	.126
.143							.011			.143
.154	-.015	-.005	-.002	.000	.007		.012	.003	-.003	.154
.171							.008			.171
.189							.006			.189
.206	-.015	-.009	-.006	-.002	.002	.003	.003	.000	-.009	.206
.223							.002			.223
.241							.001			.241
.258	-.015	-.011	-.009	-.007	-.001	-.000	.000	-.004	-.000	.258
.275							.000			.275
.293							.000			.293
.310	-.014	-.012	-.011	-.009	-.004	-.001	-.000	-.004	-.013	.310
.327							-.000			.327
.344							-.001			.344
.362	-.013	-.013	-.010	-.008	-.004	-.002	-.001	-.004	-.013	.362
.379							-.001			.379
.396	-.011	-.013	-.012	-.009	-.004	-.002	-.001	-.005	-.013	.396
.408							-.001			.408
.426	.024	.023	.044	.031	.040	.044	.044	.036	.021	.426
.451	.032	.030	.034	.039	.056	.054	.055	.046	.030	.451
.476	.030	.032	.036	.041	.054	.058	.061	.050	.033	.476
.501	.030		.039	.044	.057	.061	.064		.036	.501
.530	-.006	-.009	-.007	-.005	.001		.005	.000	-.007	.530
.548							.001			.548
.566							-.000			.566
.584	-.009	-.013	-.012	-.010	-.004	-.003	-.001	-.005	-.011	.584
.602							-.000			.602
.620							-.000			.620
.638	-.007	-.015		-.009	-.005		-.000		-.012	.638
.655							-.000			.655
.673							-.000			.673
.691	-.007	-.014	-.012		-.005	-.003		-.005	-.012	.691
.709							-.001			.709
.727							-.000			.727
.745	-.007	.003		-.011	-.006		-.000		-.011	.745
.763							-.000			.763
.781							-.001			.781
.799							-.001			.799
.817	-.007	-.013	-.013	-.010	-.005	-.002	-.000	-.005	-.010	.817
.834							-.000			.834
.870							-.000			.870
.888							.000			.888
.921	-.057									.921
.924	-.005	-.012		.043			.000			.924
.947							-.000			.947
.964							-.000			.964
.981	.000	-.010	-.011		-.004	-.002	-.000	-.003	-.008	.981
.984					-.004				-.010	.984
.998							-.001			.998
1.000	-.059									1.000

Nose rake			Base rake		
Orifice station, y, in.	Cp top	Cp side	Orifice station, y, in.	Cp top	Cp side
.010	.402		.031	.091	.147
.030	.993		.094	.147	.319
.050	1.172		.156	.194	.451
.070	1.161		.219	.245	.554
.090	1.169		.281	.279	.681
.110	1.170		.344	.310	.822
.130	1.170		.406	.352	.952
.150	1.154		.469	.390	1.051
.170	1.134		.750	.503	
.190	1.082		1.000	.628	
			1.250	.785	
			1.500	.874	

[redacted]

TABLE 14. - PRESSURE COEFFICIENTS FOR AN INTERCONTINENTAL BALLISTIC MISSILE FOR NOSE III WITH FIXED TRANSITION AT M = 3.96 - Continued

(f) $\alpha = 6.3^{\circ}$

Model station, $\frac{x}{l}$	Cp for meridian angle, θ, deg –									Model station, $\frac{x}{l}$
	0	90	105	120	150	165	180	225	270	
.039							1.763			.039
.040							1.781			.040
.041							1.643			.041
.044							1.269			.044
.049							.703			.049
.055							.550			.055
.060	.271	.401	.448	.484	.562	.573	.576	.530		.060
.075	.048	.110	.130	.149	.188	.196	.200	.170		.075
.085	.048	.106	.125	.147	.183	.190	.195	.169	.108	.085
.096	.069									.096
.126		.086	.101	.118	.152	.162	.165	.137	.089	.126
.143							.039			.143
.154	-.025	-.006	.001	.012	.030		.038	.022	-.005	.154
.171							.030			.171
.189							.025			.189
.206	-.022	-.013	-.006	.001	.016	.019	.022	.010	-.011	.206
.223							.022			.223
.241							.021			.241
.258	-.019	-.016	-.011	-.002	.013	.018	.020	.007	-.005	.258
.275							.019			.275
.293							.018			.293
.310	-.015	-.020	-.014	-.005	.008	.014	.017	.004	-.020	.310
.327							.016			.327
.344							.015			.344
.362	-.013	-.024	-.017	-.008	.006	.012	.014	.000	-.024	.362
.379							.014			.379
.396	-.011	-.026	-.021	-.010	.005	.011	.014	.000	-.026	.396
.408							.013			.408
.426	.020	.003	.031	.030	.062	.072	.075	.049	.002	.426
.451	.027	.011	.024	.042	.082	.087	.094	.062	.011	.451
.476	.023	.013	.028	.046	.080	.090	.097	.068	.015	.476
.501	.022		.029	.046	.081	.093	.100		.017	.501
.530	-.011	-.023	-.015	-.007	.011		.022	.005	-.023	.530
.548							.019			.548
.566							.020			.566
.584	-.014	-.028	-.021	-.011	.007	.013	.018	.002	-.027	.584
.602							.018			.602
.620							.017			.620
.638	-.011	-.028		-.010	.004		.017		-.027	.638
.655							.016			.655
.673							.016			.673
.691	-.011	-.030	-.023		.002	.009		-.001	-.029	.691
.709							.014			.709
.727							.015			.727
.745	-.010	-.010		-.015	.002		.016		-.029	.745
.763							.016			.763
.781							.014			.781
.799							.015			.799
.817	-.010	-.030	-.025	-.015	.004	.011	.016	-.002	-.028	.817
.834							.016			.834
.870							.016			.870
.888							.016			.888
.921	-.060									.921
.924	-.009	-.028		-.006			.017			.924
.947							.015			.947
.964							.014			.964
.981	-.004	-.026	-.028		.002	.010	.014	-.001	-.028	.981
.984					.002				-.028	.984
.998							.014			.998
1.000	-.062									1.000

Nose rake			Base rake		
Orifice station, y, in.	C_p top	C_p side	Orifice station, y, in.	C_p top	C_p side
.010	.305		.031	.220	.106
.030	.863		.094	.495	.405
.050	1.071		.156	.531	.637
.070	1.053		.219	.542	.785
.090	1.053		.281	.553	.939
.110	1.053		.344	.560	1.053
.130	1.047		.406	.566	1.115
.150	1.035		.469	.575	1.156
.170	1.002		.750	.606	
.190	.972		1.000	.647	
			1.250	.693	
			1.500	.707	

[redacted]

TABLE 14. - PRESSURE COEFFICIENTS FOR AN INTERCONTINENTAL BALLISTIC MISSILE FOR NOSE III WITH FIXED TRANSITION AT M = 3.96 - Concluded

(g) $\alpha = 10.1^{\circ}$

Model station, $\frac{x}{l}$	Cp for meridian angle, θ, deg –									Model station, $\frac{x}{l}$
	0	90	105	120	150	165	180	225	270	
.039							1.756			.039
.040							1.805			.040
.041							1.713			.041
.044							1.403			.044
.049							.836			.049
.055							.684			.055
.060	.201	.402	.470	.541	.677	.697	.709	.613		.060
.075	.017	.110	.144	.180	.250	.265	.272	.214		.075
.085	.019	.107	.137	.178	.240	.257	.265	.215	.107	.085
.096	.038									.096
.126		.082	.111	.146	.213	.231	.237	.182	.082	.126
.143							.038			.143
.154	-.024	-.006	.001	.012	.030		.037	.044	-.006	.154
.171							.031			.171
.189							.025			.189
.206	-.022	-.012	-.007	.003	.016	.019	.023	.030	-.018	.206
.223							.021			.223
.241							.021			.241
.258	-.019	-.016	-.011	-.002	.014	.018	.020	.025	-.010	.258
.275							.019			.275
.293							.018			.293
.310	-.017	-.020	-.014	-.005	.009	.014	.017	.019	-.031	.310
.327							.016			.327
.344							.016			.344
.362	-.014	-.025	-.017	-.009	.007	.012	.015	.016	-.036	.362
.379							.014			.379
.396	-.011	-.026	-.020	-.010	.006	.012	.014	.014	-.038	.396
.408							.014			.408
.426	.020	.003	.032	.029	.061	.072	.076	.078	-.015	.426
.451	.027	.010	.024	.041	.081	.089	.150	.089	-.005	.451
.476	.023	.015	.027	.046	.080	.090	.159	.097	-.003	.476
.501	.022		.028	.045	.081	.093	.163		-.001	.501
.530	-.010	-.023	-.016	-.008	.012		.058	.021	-.035	.530
.548							.053			.548
.566							.052			.566
.584	-.015	-.027	-.020	-.011	.006	.013	.050	.016	-.038	.584
.602							.050			.602
.620							.049			.620
.638	-.011	-.028		-.011	.004		.049		-.040	.638
.655							.049			.655
.673							.048			.673
.691	-.010	-.030	-.024		.003	.011		.013	-.041	.691
.709							.048			.709
.727							.049			.727
.745	-.010	-.010		-.015	.003		.049		-.043	.745
.763							.049			.763
.781							.047			.781
.799							.047			.799
.817	-.009	-.030	-.025	-.015	.003	.011	.049	.012	-.042	.817
.834							.047			.834
.870							.048			.870
.888							.046			.888
.921	-.060									.921
.924	-.009	-.029		-.006			.047			.924
.947							.044			.947
.964							.044			.964
.981	-.004	-.025	-.028		.003	.011	.044	.010	-.041	.981
.984					.002				-.041	.984
.998							.045			.998
1.000	-.061									1.000

Nose rake			Base rake		
Orifice station, y, in.	C_p top	C_p side	Orifice station, y, in.	C_p top	C_p side
.010	.137		.031	.284	.036
.030	.628		.094	.640	.347
.050	.947		.156	.601	.659
.070	.941		.219	.599	.813
.090	.934		.281	.599	.934
.110	.934		.344	.593	1.024
.130	.925		.406	.590	1.081
.150	.916		.469	.582	1.106
.170	.899		.750	.555	
.190	.849		1.000	.573	
			1.250	.639	
			1.500	.713	

[redacted]

TABLE 15. - PRESSURE COEFFICIENTS FOR AN INTERCONTINENTAL BALLISTIC MISSILE FOR NOSE III WITH FIXED TRANSITION AT $M = 4.65$

(a) $\alpha = -6.3^{\circ}$

Model station, $\frac{x}{l}$	Cp for meridian angle, θ, deg – 0	90	105	120	150	165	180	225	270	Model station, $\frac{x}{l}$
.039							1.804			.039
.040							1.661			.040
.041							1.398			.041
.044							.923			.044
.049							.356			.049
.055							.270			.055
.060	.577	.418	.386	.346	.296	.283	.275	.306		.060
.075	.204	.124	.111	.090	.070	.061	.058	.070		.075
.085	.197	.119	.103	.087	.066	.058	.057	.068	.107	.085
.096	.230									.096
.126		.092	.079	.064	.049	.045	.043	.052	.084	.126
.143							-.008			.143
.154	.047	.007	.001	-.003	-.009		-.009	-.006	.004	.154
.171							-.008			.171
.189							-.008			.189
.206	.033	-.001	-.006	-.007	-.008	-.008	-.008	-.008	-.002	.206
.223							-.007			.223
.241							-.007			.241
.258	.028	-.006	-.007	-.013	-.009	-.009	-.008	-.010	.012	.258
.275							-.006			.275
.293							-.005			.293
.310	.023	-.009	-.012	-.011	-.011	-.009	-.007	-.011	-.012	.310
.327							-.006			.327
.344							-.006			.344
.362	.020	-.012	-.013	-.013	-.011	-.011	-.006	-.012	-.014	.362
.379							-.005			.379
.396	.022	-.011	-.014	-.011	-.009	-.009	-.004	-.011	-.015	.396
.408							-.003			.408
.426	.065	.009	.038	-.003	.000	.004	.018	.002	.001	.426
.451	.082	.014	.008	.003	.022	.007	.024	.008	.008	.451
.476	.088	.018	.010	.005	.008	.012	.021	.011	.011	.476
.501	.092		.010	.007	.011	.012	.019		.011	.501
.530	.033	-.009	-.011	-.011	-.008		-.007	-.009	-.014	.530
.548							-.007			.548
.566							-.006			.566
.584	.024	-.014	-.015	-.013	-.009	-.010	-.007	-.010	-.017	.584
.602							-.006			.602
.620							-.006			.620
.638	.021	-.014		-.008	-.011		-.005		-.017	.638
.655							-.005			.655
.673							-.006			.673
.691	.021	-.014	-.015		-.011	-.009		-.011	-.018	.691
.709							-.005			.709
.727							-.005			.727
.745	.020	.017		-.013	-.011		-.005		-.019	.745
.763							-.005			.763
.781							-.005			.781
.799							-.005			.799
.817	.021	-.017	-.014	-.011	-.009	-.008	-.005	-.009	-.019	.817
.834							-.005			.834
.870							-.005			.870
.888							-.005			.888
.921	-.034									.921
.924	.021	-.017		-.009			-.004			.924
.947							-.005			.947
.964							-.003			.964
.981	.026	-.016	-.014		-.011	-.011	-.005	-.011	-.016	.981
.984					-.010				-.017	.984
.998							-.008			.998
1.000	-.035									1.000

Nose rake			Base rake		
Orifice station, y, in.	Cp top	Cp side	Orifice station, y, in.	Cp top	Cp side
.010	.828		.031	.365	.061
.030	1.364		.094	.865	.317
.050	1.467		.156	1.156	.508
.070	1.504		.219	1.451	.614
.090	1.541		.281	1.649	.762
.110	1.569		.344	1.709	.849
.130	1.601		.406	1.765	.946
.150	1.615		.469	1.797	.990
.170	1.610		.750	1.878	
.190	1.587		1.000	1.871	
			1.250	1.910	
			1.500	1.894	

[redacted]

[redacted]

TABLE 15. - PRESSURE COEFFICIENTS FOR AN INTERCONTINENTAL BALLISTIC MISSILE FOR NOSE III WITH FIXED TRANSITION AT M = 4.65 - Continued

(b) $\alpha = -3.0^{\circ}$

Model station, $\frac{x}{l}$	Cp for meridian angle, θ, deg –									Model station, $\frac{x}{l}$
	0	90	105	120	150	165	180	225	270	
.039							1.834			.039
.040							1.720			.040
.041							1.492			.041
.044							1.046			.044
.049							.448			.049
.055							.310			.055
.060	.482	.420	.407	.384	.358	.349	.341	.354		.060
.075	.154	.126	.119	.106	.097	.091	.088	.094		.075
.085	.150	.119	.111	.102	.091	.086	.085	.089	.106	.085
.096	.176									.096
.126		.094	.087	.081	.070	.068	.066	.069	.086	.126
.143							-.003			.143
.154	.024	.007	.004	.002	-.002		-.003	-.001	.005	.154
.171							-.004			.171
.189							-.004			.189
.206	.014	.001	-.002	-.003	-.005	-.005	-.005	-.004	.000	.206
.223							-.005			.223
.241							-.005			.241
.258	.009	-.002	-.004	-.006	-.007	-.007	-.006	-.006	.018	.258
.275							-.005			.275
.293							-.004			.293
.310	.007	-.006	-.007	-.008	-.007	-.007	-.006	-.007	-.006	.310
.327							-.005			.327
.344							-.004			.344
.362	.006	-.007	-.006	-.005	-.003	-.003	-.002	-.004	-.007	.362
.379							-.001			.379
.396	.007	-.002	-.003	-.002	-.002	-.002	.000	-.001	-.004	.396
.408							.000			.408
.426	.037	.009	.042	.001	.001	.002	.005	.003	.012	.426
.451	.049	.026	.019	.012	.024	.006	.013	.011	.022	.451
.476	.052	.028	.022	.018	.013	.012	.017	.018	.024	.476
.501	.058		.024	.019	.016	.016	.020		.026	.501
.530	.014	-.004	-.009	-.008	-.007		-.004	-.006	-.006	.530
.548							-.005			.548
.566							-.004			.566
.584	.006	-.007	-.009	-.010	-.007	-.007	-.003	-.006	-.010	.584
.602							-.003			.602
.620							-.003			.620
.638	.005	-.010		-.004	-.007		-.002		-.010	.638
.655							-.002			.655
.673							-.002			.673
.691	.006	-.010	-.012		-.007	-.005		-.007	-.011	.691
.709							-.002			.709
.727							-.002			.727
.745	.006	.023		-.009	-.007		-.002		-.011	.745
.763							-.002			.763
.781							-.002			.781
.799							-.002			.799
.817	.006	-.011	-.010	-.009	-.005	-.004	-.002	-.005	-.010	.817
.834							-.002			.834
.870							-.002			.870
.888							-.002			.888
.921	-.035									.921
.924	.006	-.011		-.007			-.002			.924
.947							-.002			.947
.964							-.002			.964
.981	.008	-.008	-.008		-.006	-.005	-.002	-.004	-.008	.981
.984					-.007				-.010	.984
.998							-.006			.998
1.000	-.036									1.000

Nose rake			Base rake		
Orifice station, y, in.	Cp top	Cp side	Orifice station, y, in.	Cp top	Cp side
.010	.527		.031	.206	.111
.030	1.148		.094	.428	.259
.050	1.370		.156	.599	.370
.070	1.379		.219	.774	.444
.090	1.404		.281	.970	.548
.110	1.400		.344	1.143	.663
.130	1.404		.406	1.266	.781
.150	1.407		.469	1.344	.899
.170	1.397		.750	1.370	
.190	1.351		1.000	1.483	
			1.250	1.561	
			1.500	1.603	

[redacted]

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TABLE 15. - PRESSURE COEFFICIENTS FOR AN INTERCONTINENTAL BALLISTIC MISSILE FOR NOSE III WITH FIXED TRANSITION AT M = 4.65 - Continued

(c) $\alpha = 0^{\circ}$

Model station, $\frac{x}{l}$	Cp for meridian angle, θ, deg –									Model station, $\frac{x}{l}$
	0	90	105	120	150	165	180	225	270	
.039							1.839			.039
.040							1.786			.040
.041							1.553			.041
.044							1.138			.044
.049							.515			.049
.055							.404			.055
.060	.408	.420	.426	.420	.417	.412	.408	.402		.060
.075	.119	.125	.129	.124	.125	.123	.121	.116		.075
.085	.114	.120	.120	.120	.119	.117	.116	.114	.109	.085
.096	.138									.096
.126		.095	.096	.096	.095	.094	.092	.089	.088	.126
.143							.008			.143
.154	.010	.009	.008	.009	.007		.006	.006	.005	.154
.171							.004			.171
.189							.001			.189
.206	.003	.002	.001	.003	.002	.000	.000	.001	.000	.206
.223							-.000			.223
.241							-.001			.241
.258	.000	-.0	.000	-.001	-.001	-.002	-.002	-.001	.019	.258
.275							-.002			.275
.293							-.002			.293
.310	-.001	-.003	-.003	-.003	-.004	-.004	-.003	-.003	-.003	.310
.327							-.004			.327
.344							-.004			.344
.362	-.001	-.005	-.003	-.005	-.005	-.005	-.004	-.004	-.005	.362
.379							-.004			.379
.396	.001	-.002	-.000	.001	.001	-.000	-.001	-.002	-.003	.396
.408							-.000			.408
.426	.026	.025	.050	.011	.009	.010	.019	.013	.016	.426
.451	.032	.028	.030	.027	.038	.026	.031	.029	.027	.451
.476	.032	.031	.032	.031	.031	.030	.033	.032	.029	.476
.501	.038		.033	.032	.031	.032	.033		.030	.501
.530	.007	-.0	-.000	-.001	-.000		.000	-.001	-.003	.530
.548							-.000			.548
.566							-.000			.566
.584	-.000	-.003	-.003	-.003	-.002	-.003	-.000	-.002	-.003	.584
.602							-.001			.602
.620							-.001			.620
.638	-.001	-.004		.000	-.004		-.000		-.003	.638
.655							-.000			.655
.673							-.002			.673
.691	-.001	-.004	-.005		-.006	-.006		-.003	-.005	.691
.709							-.004			.709
.727							-.003			.727
.745	-.000	.028		-.005	-.006		-.002		-.005	.745
.763							-.002			.763
.781							-.002			.781
.799							-.002			.799
.817	-.000	-.005	-.005	-.005	-.003	-.003	-.001	-.003	-.003	.817
.834							-.001			.834
.870							-.001			.870
.888							-.000			.888
.921	-.034									.921
.924	.000	-.004		-.004			-.001			.924
.947							-.002			.947
.964							-.001			.964
.981	.001	-.002	-.003		-.004	-.005	-.001	-.001	-.002	.981
.984					-.004				-.003	.984
.998							-.004			.998
1.000	-.034									1.000

Nose rake			Base rake		
Orifice station, y, in.	Cp top	Cp side	Orifice station, y, in.	Cp top	Cp side
.010	.386		.031	.100	.107
.030	1.041		.094	.192	.211
.050	1.248		.156	.252	.280
.070	1.271		.219	.309	.358
.090	1.260		.281	.349	.411
.110	1.269		.344	.397	.485
.130	1.262		.406	.448	.556
.150	1.251		.469	.526	.660
.170	1.234		.750	.789	
.190	1.198		1.000	1.013	
			1.250	1.158	
			1.500	1.320	

[redacted]

[redacted]

TABLE 15. - PRESSURE COEFFICIENTS FOR AN INTERCONTINENTAL BALLISTIC MISSILE FOR NOSE III WITH FIXED TRANSITION AT M = 4.65 - Continued

(d) $\alpha = 3.0^{\circ}$

Model station, $\frac{x}{l}$	Cp for meridian angle, θ, deg –									Model station, $\frac{x}{l}$
	0	90	105	120	150	165	180	225	270	
.039							1.840			.039
.040							1.801			.040
.041							1.614			.041
.044							1.220			.044
.049							.605			.049
.055							.466			.055
.060	.340	.421	.443	.456	.483	.486	.482	.452		.060
.075	.089	.124	.135	.140	.158	.159	.158	.141		.075
.085	.085	.119	.128	.136	.150	.153	.154	.137	.108	.085
.096	.103									.096
.126		.092	.100	.106	.118	.122	.121	.110	.087	.126
.143							.022			.143
.154	.001	.007	.011	.015	.019		.021	.013	.004	.154
.171							.016			.171
.189							.015			.189
.206	-.002	.003	.004	.008	.011	.011	.013	.007	-.000	.206
.223							.010			.223
.241							.007			.241
.258	-.004	-.002	.000	.001	.004	.006	.006	.002	.017	.258
.275							.006			.275
.293							.005			.293
.310	-.005	-.004	-.003	-.000	.002	.003	.004	-.000	-.006	.310
.327							.004			.327
.344							.004			.344
.362	-.004	-.007	-.004	-.002	.001	.003	.003	-.001	-.007	.362
.379							.003			.379
.396	.001	-.003	-.004	-.002	.001	.002	.003	-.001	-.005	.396
.408							.003			.408
.426	.014	.014	.052	.026	.035	.036	.037	.027	.009	.426
.451	.021	.026	.031	.038	.056	.047	.047	.035	.021	.451
.476	.021	.029	.035	.040	.049	.051	.053	.041	.024	.476
.501	.027		.036	.041	.051	.055	.056		.025	.501
.530	.003	-.003	-.000	.003	.007		.010	.003	-.006	.530
.548							.004			.548
.566							.004			.566
.584	-.003	-.006	-.004	-.002	.001	.001	.003	-.003	-.009	.584
.602							.003			.602
.620							.003			.620
.638	-.003	-.008		.001	.001		.003		-.009	.638
.655							.003			.655
.673							.003			.673
.691	-.003	-.008	-.006		-.000	.001		-.005	-.009	.691
.709							.002			.709
.727							.002			.727
.745	-.003	.024		-.004	-.000		.002		-.008	.745
.763							.002			.763
.781							.002			.781
.799							.002			.799
.817	-.002	-.009	-.006	-.005	.000	.001	.002	-.003	-.008	.817
.834							.001			.834
.870							.001			.870
.888							.001			.888
.921	-.033									.921
.924	-.001	-.008		-.004			.001			.924
.947							.000			.947
.964							.001			.964
.981	.001	-.006	-.007		-.000	.001	.001	-.002	-.006	.981
.984					-.000				-.008	.984
.998							.000			.998
1.000	-.035									1.000

Nose rake			Base rake		
Orifice station, y, in.	C_p top	C_p side	Orifice station, y, in.	C_p top	C_p side
.010	.249		.031	.065	.109
.030	.883		.094	.100	.277
.050	1.139		.156	.139	.386
.070	1.133		.219	.187	.473
.090	1.133		.281	.208	.589
.110	1.128		.344	.226	.724
.130	1.128		.406	.252	.844
.150	1.116		.469	.286	.948
.170	1.100		.750	.362	
.190	1.052		1.000	.471	
			1.250	.577	
			1.500	.674	

[redacted]

[redacted]

TABLE 15. - PRESSURE COEFFICIENTS FOR AN INTERCONTINENTAL BALLISTIC MISSILE FOR NOSE III WITH FIXED TRANSITION AT M = 4.65 - Concluded

(e) $\alpha = 6.3^{\circ}$

Model station, $\frac{x}{l}$	Cp for meridian angle, θ, deg –									Model station, $\frac{x}{l}$
	0	90	105	120	150	165	180	225	270	
.039							1.831			.039
.040							1.833			.040
.041							1.824			.041
.044							1.700			.044
.049							1.317			.049
.055							.713			.055
.060	.275	.418	.461	.497	.567	.575	.575	.513		.060
.075	.061	.124	.146	.164	.200	.208	.206	.173		.075
.085	.058	.120	.137	.160	.191	.198	.202	.169	.109	.085
.096	.075									.096
.126		.092	.106	.123	.153	.161	.164	.132	.086	.126
.143							.047			.143
.154	-.008	.007	.014	.026	.040		.046	.028	.003	.154
.171							.038			.171
.189							.032			.189
.206	-.008	.0	.004	.013	.024	.027	.028	.016	-.003	.206
.223							.026			.223
.241							.025			.241
.258	-.007	-.005	-.000	.005	.019	.022	.024	.010	.013	.258
.275							.023			.275
.293							.021			.293
.310	-.007	-.010	-.004	.002	.015	.019	.020	.006	-.013	.310
.327							.019			.327
.344							.018			.344
.362	-.007	.042	-.006	-.000	.012	.016	.017	.003	-.015	.362
.379							.016			.379
.396	-.003	-.011	-.009	-.002	.010	.015	.017	.001	-.015	.396
.408							.017			.408
.426	.017	.005	.049	.029	.051	.060	.063	.037	.002	.426
.451	.022	.014	.027	.042	.082	.081	.083	.051	.009	.451
.476	.019	.017	.031	.048	.078	.086	.088	.059	.013	.476
.501	.023		.033	.048	.078	.088	.090		.015	.501
.530	-.000	-.010	-.005	.002	.018		.026	.005	-.013	.530
.548							.023			.548
.566							.023			.566
.584	-.007	-.014	-.009	-.002	.013	.018	.021	.002	-.015	.584
.602							.020			.602
.620							.019			.620
.638	-.006	-.015		.001	.011		.019		-.017	.638
.655							.018			.655
.673							.017			.673
.691	-.006	-.014	-.011		.010	.014		-.000	-.017	.691
.709							.017			.709
.727							.016			.727
.745	-.006	.018		-.005	.010		.016		-.018	.745
.763							.016			.763
.781							.016			.781
.799							.016			.799
.817	-.005	-.017	-.012	-.006	.010	.015	.018	-.002	-.018	.817
.834							.017			.834
.870							.016			.870
.888							.017			.888
.921	-.036									.921
.924	-.005	-.017		-.005			.016			.924
.947							.016			.947
.964							.014			.964
.981	-.004	-.016	-.013		.008	.013	.015	-.002	-.015	.981
.984					.008				-.015	.984
.998							.015			.998
1.000	-.036									1.000

Nose rake			Base rake		
Orifice station, y, in.	Cp top	Cp side	Orifice station, y, in.	Cp top	Cp side
.010	.141		.031	.120	.369
.030	.651		.094	.277	.549
.050	1.029		.156	.346	.676
.070	1.029		.219	.381	.814
.090	1.022		.281	.388	.902
.110	1.015		.344	.399	.948
.130	1.003		.406	.413	1.001
.150	.990		.469	.423	4.805
.170	.967		.750	.448	
.190	.925		1.000	.473	
			1.250	.521	
			1.500	.558	

[redacted]

TABLE 16. - PRESSURE COEFFICIENTS FOR AN INTERCONTINENTAL BALLISTIC MISSILE FOR NOSE IV WITH NATURAL TRANSITION AT M = 1.57

(a) $\alpha = -10.1^{\circ}$

Model station, $\frac{x}{l}$	Cp for meridian angle, θ, deg – 0	90	105	120	150	165	180	225	270	Model station, $\frac{x}{l}$
.042							1.517			.042
.043							1.430			.043
.044							1.284			.044
.046							.994			.046
.049							.309			.049
.053							.534			.053
.060	-.139		-.332	-.362	-.381	-.383	-.381	-.370		.060
.075	.186		-.184	-.249	-.295	-.303	-.312	-.282		.075
.085	.357	.050	-.023	-.100	-.191	-.208	-.231	-.174	-.000	.085
.126		.106	.056	.021	-.023	-.024	-.025	-.009	.089	.126
.143							-.234			.143
.154	-.011	-.171	-.200	-.221	-.219	-.200	-.181	-.240	-.186	.154
.171							-.143			.171
.189							-.106			.189
.206	.022	-.161	-.186	-.192	-.112	-.086	-.078	-.140	-.163	.206
.223							-.054			.223
.241							-.041			.241
.258	.020	-.166	-.177	-.128	-.061	-.037	-.029	-.080	-.171	.258
.275							-.022			.275
.293							-.016			.293
.310	.018	-.159	-.129	-.082	-.046	-.019	-.007	-.055	-.157	.310
.327							-.000			.327
.344							.000			.344
.362	.011	-.129	-.095	-.055	-.049	-.015	.001	-.045	-.122	.362
.379							.000			.379
.396	.008	-.111	-.084	-.043	-.051	-.013	.010	-.037	-.105	.396
.408							.004			.408
.426	.218	.080	.095	.083	.060	.171	.215	.086	.093	.426
.451	.205	.072	.060	.075	.052	.114	.144	.085	.070	.451
.476	.200	.048	.044	.063	.032	.095	.105	.072	.054	.476
.501	.194	.041	.036	.044	.014	.075	.084	.044	.044	.501
.530	-.006	-.129	-.137	-.114	-.102	-.131	-.107	-.081	-.128	.530
.548							-.123			.548
.566							-.065			.566
.584	.026	-.117	-.105	-.085	-.088	-.067	-.056	-.076	-.118	.584
.602							-.049			.602
.620							-.039			.620
.638	.029	-.103		-.077	-.049				-.106	.638
.655							-.027			.655
.673							-.023			.673
.691	.029	-.116	-.104	-.067	-.042	-.043	-.021	-.037	-.101	.691
.709							-.018			.709
.727							-.020			.727
.745	.034	-.112		-.050	-.034		-.019		-.092	.745
.763							-.018			.763
.781							-.027			.781
.799							-.020			.799
.817	.039	-.091	-.060	-.037	-.030	-.027	-.010	-.027	-.072	.817
.834							-.016			.834
.852							-.009			.852
.870							-.009			.870
.888							-.008			.888
.906							-.002			.906
.921	-.176									.921
.924	.047	-.073		-.025	-.014		.049		-.078	.924
.947							.040			.947
.964							.048			.964
.981	.061	-.042	.004		.009	.008	.035	.010	-.045	.981
1.000	-.184									1.000

Nose rake			Base rake		
Orifice station, y, in.	Cp top	Cp side	Orifice station, y, in.	Cp top	Cp side
.010	1.238	.386	.031	.876	.426
.030	1.467	.883	.094	1.563	1.021
.050	1.532	1.038	.156	1.638	1.487
.070	1.550	1.090	.219	1.574	1.613
.090	1.562	1.109	.281	1.579	1.542
.110	1.568	1.133	.344	1.568	1.483
.130	1.561	1.146	.406	1.570	1.495
.150	1.555	1.159	.469	1.575	1.485
.170	1.537	1.157	.750	1.566	
.190	1.451	1.107	1.000	1.569	
			1.250	1.562	
			1.500	1.561	

[redacted]

TABLE 16. - PRESSURE COEFFICIENTS FOR AN INTERCONTINENTAL BALLISTIC MISSILE FOR NOSE IV WITH NATURAL TRANSITION AT M = 1.57 - Continued

(b) $\alpha = -6.3^{\circ}$

Model station, $\frac{x}{l}$	Cp for meridian angle, θ, deg –									Model station, $\frac{x}{l}$
	0	90	105	120	150	165	180	225	270	
.042							1.542			.042
.043							1.476			.043
.044							1.354			.044
.046							1.084			.046
.049							.559			.049
.053							.572			.053
.060	-.202		-.308	-.333	-.359	-.365	-.367	-.333		.060
.075	.045		-.172	-.221	-.258	-.263	-.260	-.252		.075
.085	.206	.030	-.013	-.069	-.150	-.143	-.156	-.122	.003	.085
.096	.419									.096
.126		.125	.091	.071	.033	.027	.025	.047	.106	.126
.143							-.219			.143
.154	-.066	-.151	-.163	-.176	-.184	-.181	-.170	-.188	-.158	.154
.171							-.142			.171
.189							-.110			.189
.206	-.025	-.114	-.119	-.126	-.100	-.090	-.086	-.109	-.115	.206
.223							-.066			.223
.241							-.052			.241
.258	-.019	-.092	-.091	-.083	-.053	-.042	-.040	-.061	-.089	.258
.275							-.030			.275
.293							-.019			.293
.310	-.024	-.074	-.069	-.050	-.024	-.013	-.012	-.030	-.074	.310
.327							-.010			.327
.344							-.009			.344
.362	-.010	-.057	-.046	-.034	-.020	-.011	-.007	-.024	-.055	.362
.379							-.007			.379
.396	-.014	-.048	-.046	-.034	-.013	-.007	.001	-.019	-.047	.396
.408							.032			.408
.426	.193	.139	.144	.141	.137	.155	.169	.135	.142	.426
.451	.179	.124	.117	.117	.116	.121	.132	.118	.118	.451
.476	.169	.103	.094	.092	.094	.099	.105	.097	.104	.476
.501	.161	.091	.081	.074	.064	.076	.086	.069	.092	.501
.530	-.034	-.092	-.101	-.104	-.082	-.089	-.103	-.081	-.093	.530
.548							-.076			.548
.566							-.057			.566
.584	-.001	-.072	-.071	-.067	-.061	-.057	-.050	-.060	-.071	.584
.602							-.037			.602
.620							-.037			.620
.638	-.000	-.052		-.044	-.038				-.055	.638
.655							-.022			.655
.673							-.021			.673
.691	.000	-.056	-.054	-.046	-.032	-.030	-.014	-.025	-.048	.691
.709							-.012			.709
.727							-.009			.727
.745	-.000	-.054		-.036	-.018		-.003		-.040	.745
.763							-.006			.763
.781							-.009			.781
.799							-.007			.799
.817	.016	-.039	-.032	-.021	-.014	-.008	.000	-.011	-.024	.817
.834							-.003			.834
.852							.005			.852
.870							.006			.870
.888							.009			.888
.906							.005			.906
.921	-.119									.921
.924	.027	-.028		-.017	-.003		.015		-.037	.924
.947							.008			.947
.964							.018			.964
.981	.040	-.011	-.009		-.001	.001	.005	-.006	-.017	.981
1.000	-.127									1.000

Nose rake			Base rake		
Orifice station, y, in.	C_p top	C_p side	Orifice station, y, in.	C_p top	C_p side
.010	1.117	.559	.031	.740	.513
.030	1.420	.954	.094	1.252	.907
.050	1.519	1.059	.156	1.543	1.239
.070	1.545	1.099	.219	1.548	1.480
.090	1.559	1.117	.281	1.533	1.535
.110	1.556	1.136	.344	1.541	1.496
.130	1.548	1.152	.406	1.545	1.494
.150	1.534	1.160	.469	1.546	1.504
.170	1.509	1.152	.750	1.546	
.190	1.414	1.087	1.000	1.550	
			1.250	1.548	
			1.500	1.539	

[redacted]

TABLE 16. - PRESSURE COEFFICIENTS FOR AN INTERCONTINENTAL BALLISTIC MISSILE FOR NOSE IV WITH NATURAL TRANSITION AT M = 1.57 - Continued

(c) $\alpha = -3.0^{\circ}$

Model station, $\frac{x}{l}$	Cp for meridian angle, θ, deg –									Model station, $\frac{x}{l}$
	0	90	105	120	150	165	180	225	270	
.042							1.552			.042
.043							1.511			.043
.044							1.403			.044
.046							1.158			.046
.049							.725			.049
.053							.617			.053
.060	-.246		-.289	-.297	-.310	-.334	-.340	-.312		.060
.075	-.050		-.147	-.182	-.212	-.219	-.199	-.215		.075
.085	.098	.017	-.001	-.021	-.078	-.072	-.094	-.060	.003	.085
.096	.421									.096
.126		.135	.119	.107	.081	.076	.076	.088	.116	.126
.143							-.199			.143
.154	-.104	-.131	-.141	-.150	-.160	-.162	-.155	-.161	-.142	.154
.171							-.133			.171
.189							-.107			.189
.206	-.058	-.086	-.087	-.097	-.087	-.085	-.085	-.089	-.088	.206
.223							-.063			.223
.241							-.053			.241
.258	-.040	-.055	-.057	-.055	-.048	-.043	-.045	-.047	-.053	.258
.293							-.033			.293
.310	-.029	-.037	-.038	-.034	-.029	-.023	-.023	-.028	-.039	.310
.327							-.015			.327
.344							-.011			.344
.362	-.018	-.028	-.024	-.017	-.013	-.011	-.009	-.014	-.026	.362
.379							-.011			.379
.396	-.017	-.020	-.019	-.018	-.012	-.011	-.004	-.013	-.020	.396
.408							.013			.408
.426	.182	.168	.166	.162	.160	.164	.162	.165	.165	.426
.451	.163	.147	.143	.141	.140	.139	.142	.137	.140	.451
.476	.146	.126	.120	.119	.117	.116	.115	.124	.124	.476
.501	.134	.111	.110	.100	.094	.093	.095	.102	.112	.501
.530	-.055	-.072	-.079	-.084	-.079	-.081	-.083	-.076	-.073	.530
.548							-.065			.548
.566							-.053			.566
.584	-.017	-.048	-.049	-.051	-.051	-.052	-.048	-.045	-.049	.584
.602							-.041			.602
.620							-.030			.620
.638	-.017	-.028		-.031	-.021				-.030	.638
.655							-.025			.655
.673							-.023			.673
.691	-.012	-.030	-.028	-.030	-.029	-.025	-.017	-.020	-.024	.691
.709							-.016			.709
.727							-.012			.727
.745	-.010	-.027		-.023	-.015		-.009		-.015	.745
.763							-.003			.763
.781							-.013			.781
.799							-.002			.799
.817	.006	-.015	-.012	-.011	-.007	-.004	-.002	-.001	.000	.817
.834							-.005			.834
.852							.001			.852
.870							.003			.870
.888							.007			.888
.906							.003			.906
.921	-.082									.921
.924	.017	-.003		-.011	.001		.010		-.010	.924
.947							.005			.947
.964							.013			.964
.981	.036	.017	.008		.007	.007	.005	.002	.004	.981
1.000	-.086									1.000

Nose rake			Base rake		
Orifice station, y, in.	Cp top	Cp side	Orifice station, y, in.	Cp top	Cp side
.010	.963	.569	.031	.616	.510
.030	1.360	.955	.094	.955	.754
.050	1.506	1.060	.156	1.222	.962
.070	1.545	1.093	.219	1.413	1.162
.090	1.560	1.114	.281	1.478	1.329
.110	1.537	1.133	.344	1.492	1.428
.130	1.524	1.144	.406	1.491	1.467
.150	1.503	1.151	.469	1.500	1.481
.170	1.470	1.144	.750	1.515	
.190	1.375	1.071	1.000	1.538	
			1.250	1.563	
			1.500	1.573	

[redacted]

TABLE 16. - PRESSURE COEFFICIENTS FOR AN INTERCONTINENTAL BALLISTIC MISSILE FOR NOSE IV WITH NATURAL TRANSITION AT M = 1.57 - Continued

(d) $\alpha = 0^{\circ}$

Model station, $\frac{x}{l}$	Cp for meridian angle, θ, deg –									Model station, $\frac{x}{l}$
	0	90	105	120	150	165	180	225	270	
.042							1.556			.042
.043							1.532			.043
.044							1.444			.044
.046							1.229			.046
.049							.824			.049
.053							.665			.053
.060	-.275		-.277	-.295	-.288	-.307	-.310	-.275		.060
.075	-.135		-.111	-.138	-.143	-.148	-.129	-.151		.075
.085	.000	.007	.012	.009	.000	.010	-.012	-.008	.003	.085
.126		.138	.138	.136	.129	.128	.129	.127	.115	.126
.143							-.172			.143
.154	-.135	-.127	-.129	-.131	-.136	-.136	-.131	-.142	-.136	.154
.171							-.115			.171
.189							-.094			.189
.206	-.077	-.076	-.074	-.081	-.076	-.076	-.077	-.077	-.079	.206
.223							-.060			.223
.241							-.052			.241
.258	-.047	-.043	-.045	-.046	-.044	-.041	-.045	-.043	-.042	.258
.275							-.045			.275
.293							-.042			.293
.310	-.029	-.025	-.028	-.027	-.031	-.028	-.028	-.029	-.028	.310
.327							-.022			.327
.344							-.016			.344
.362	-.016	-.019	-.017	-.013	-.014	-.013	-.013	-.014	-.017	.362
.379							-.015			.379
.396	-.016	-.010	-.012	-.013	-.014	-.014	-.006	-.015	-.010	.396
.408							-.013			.408
.426	.171	.175	.175	.174	.173	.175	.172	.173	.171	.426
.451	.147	.154	.154	.154	.154	.152	.155	.148	.150	.451
.476	.128	.134	.132	.135	.132	.130	.129	.136	.135	.476
.501	.112	.119	.121	.114	.114	.112	.113	.114	.121	.501
.530	-.070	-.069	-.068	-.072	-.069	-.071	-.072	-.074	-.066	.530
.548							-.056			.548
.566							-.044			.566
.584	-.041	-.040	-.039	-.041	-.044	-.046	-.041	-.037	-.041	.584
.602							-.034			.602
.620							-.026			.620
.638	-.026	-.025		-.018	-.020				-.026	.638
.655							-.021			.655
.673							-.022			.673
.691	-.017	-.023	-.021	-.021	-.030	-.027	-.018	-.019	-.017	.691
.709							-.018			.709
.727							-.014			.727
.745	-.003	-.018		-.016	-.011		-.006		-.007	.745
.763							-.010			.763
.781							-.014			.781
.799							-.009			.799
.817	.002	-.006	-.005	-.007	-.008	-.005	-.002	-.003	.006	.817
.834							-.006			.834
.852							-.000			.852
.870							.002			.870
.888							.006			.888
.906							.005			.906
.921	-.074									.921
.924	-.005	.004		-.005	.001		.007		-.003	.924
.947							.006			.947
.964							.010			.964
.981	.051	.030	.014		.009	.007	.005	.007	.006	.981
1.000	-.076									1.000

Nose rake			Base rake		
Orifice station, y, in.	Cp top	Cp side	Orifice station, y, in.	Cp top	Cp side
.010	.817	.565	.031	.464	.497
.030	1.311	.957	.094	.660	.686
.050	1.491	1.059	.156	.810	.838
.070	1.536	1.097	.219	.954	.993
.090	1.541	1.112	.281	1.074	1.135
.110	1.495	1.130	.344	1.208	1.261
.130	1.471	1.141	.406	1.313	1.358
.150	1.437	1.150	.469	1.390	1.422
.170	1.413	1.142	.750	1.463	
.190	1.323	1.060	1.000	1.479	
			1.250	1.487	
			1.500	1.500	

[redacted]

[redacted]

TABLE 16. - PRESSURE COEFFICIENTS FOR AN INTERCONTINENTAL BALLISTIC MISSILE FOR NOSE IV WITH NATURAL TRANSITION AT M = 1.57 - Continued

(e) $\alpha = 3.0^{\circ}$

Model station, $\frac{x}{l}$	Cp for meridian angle, θ, deg –									Model station, $\frac{x}{l}$
	0	90	105	120	150	165	180	225	270	
.042							1.555			.042
.043							1.543			.043
.044							1.484			.044
.046							1.292			.046
.049							.915			.049
.053							.713			.053
.060	-.298		-.271	-.272	-.246	-.270	-.268	-.266		.060
.075	-.221		-.110	-.099	-.035	-.075	-.046	-.091		.075
.085	-.083	.031	.049	.061	.078	.107	.079	.056	.000	.085
.096	.047									.096
.126		.136	.149	.161	.178	.182	.187	.163	.113	.126
.143							-.140			.143
.154	-.159	-.132	-.125	-.118	-.108	-.105	-.100	-.123	-.142	.154
.171							-.087			.171
.189							-.071			.189
.206	-.091	-.089	-.075	-.078	-.062	-.058	-.059	-.071	-.088	.206
.223							-.045			.223
.241							-.042			.241
.258	-.044	-.057	-.053	-.047	-.038	-.034	-.038	-.045	-.057	.258
.275							-.038			.275
.293							-.034			.293
.310	-.022	-.035	-.038	-.033	-.033	-.029	-.028	-.036	-.037	.310
.327							-.025			.327
.344							-.023			.344
.362	-.011	-.029	-.027	-.021	-.021	-.015	-.014	-.023	-.027	.362
.379							-.015			.379
.396	-.010	-.018	-.020	-.019	-.014	-.013	-.006	-.020	-.020	.396
.408							-.016			.408
.426	.161	.166	.171	.173	.177	.184	.181	.174	.164	.426
.451	.137	.144	.148	.155	.164	.162	.166	.153	.140	.451
.476	.116	.123	.126	.136	.154	.155	.156	.145	.127	.476
.501	.096	.113	.122	.121	.132	.133	.137	.128	.112	.501
.530	-.074	-.072	-.069	-.069	-.057	-.056	-.056	-.064	-.078	.530
.548							-.041			.548
.566							-.029			.566
.584	-.045	-.046	-.042	-.039	-.037	-.033	-.028	-.036	-.049	.584
.602							-.023			.602
.620							-.012			.620
.638	-.028	-.031		-.018	-.012				-.029	.638
.655							-.014			.655
.673							-.015			.673
.691	-.012	-.033	-.030	-.027	-.029	-.024	-.011	-.017	-.022	.691
.709							-.013			.709
.727							-.009			.727
.745	-.004	-.026		-.022	-.009		-.001		-.016	.745
.763							-.006			.763
.781							-.013			.781
.799							-.008			.799
.817	.003	-.011	-.012	-.012	-.008	-.002	.001	-.006	.000	.817
.834							-.003			.834
.852							.004			.852
.870							.006			.870
.888							.009			.888
.906							.007			.906
.921	-.082									.921
.924	.014	.0		-.008	.002		.016		-.010	.924
.947							.011			.947
.964							.016			.964
.981	.103	.020	.002		.013	.011	.009	.006	.004	.981
1.000	-.095									1.000

Nose rake			Base rake		
Orifice station, y, in.	Cp top	Cp side	Orifice station, y, in.	Cp top	Cp side
.010	.667	.588	.031	.452	.508
.030	1.219	.968	.094	.604	.743
.050	1.456	1.063	.156	.706	.942
.070	1.518	1.100	.219	.787	1.148
.090	1.507	1.118	.281	.853	1.313
.110	1.633	1.133	.344	.931	1.411
.130	1.404	1.147	.406	1.004	1.462
.150	1.376	1.149	.469	1.068	1.475
.170	1.351	1.143	.750	1.342	
.190	1.269	1.043	1.000	1.453	
			1.250	1.469	
			1.500	1.479	

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TABLE 16. - PRESSURE COEFFICIENTS FOR AN INTERCONTINENTAL BALLISTIC MISSILE FOR NOSE IV WITH NATURAL TRANSITION AT M = 1.57 - Continued

(f) $\alpha = 6.3^{\circ}$

Model station, $\frac{x}{l}$	Cp for meridian angle, θ, deg – 0	90	105	120	150	165	180	225	270	Model station, $\frac{x}{l}$
.042							1.542			.042
.043							1.556			.043
.044							1.513			.044
.046							1.359			.046
.049							1.000			.049
.053							.767			.053
.060	-.361		-.265	-.244	-.211	-.199	-.212	-.225		.060
.075	-.254		-.091	-.040	.026	.074	.054	-.024		.075
.085	-.153	.025	.088	.102	.194	.201	.188	.133	.001	.085
.096	-.045									.096
.126		.125	.154	.185	.233	.244	.253	.201	.104	.126
.143							-.102			.143
.154	-.177	-.145	-.127	-.108	-.078	-.067	-.061	-.102	-.155	.154
.171							-.051			.171
.189							-.037			.189
.206	-.082	-.114	-.096	-.084	-.042	-.031	-.028	-.064	-.115	.206
.223							-.018			.223
.241							-.020			.241
.258	-.037	-.090	-.084	-.065	-.029	-.018	-.019	-.050	-.091	.258
.275							-.022			.275
.293							-.019			.293
.310	-.015	-.071	-.071	-.056	-.029	-.017	-.013	-.049	-.072	.310
.327							-.016			.327
.344							-.022			.344
.362	-.008	-.059	-.059	-.049	-.030	-.020	-.016	-.043	-.055	.362
.379							-.011			.379
.396	-.007	-.049	-.052	-.044	-.017	-.008	-.000	-.036	-.048	.396
.408							-.009			.408
.426	.166	.139	.145	.153	.178	.195	.193	.162	.140	.426
.451	.134	.120	.126	.138	.167	.173	.180	.146	.118	.451
.476	.108	.101	.109	.127	.161	.171	.175	.144	.103	.476
.501	.096	.090	.106	.120	.153	.160	.167	.144	.088	.501
.530	-.102	-.088	-.082	-.074	-.046	-.039	-.036	-.058	-.093	.530
.548							-.021			.548
.566							-.007			.566
.584	-.048	-.067	-.059	-.047	-.020	-.014	-.007	-.032	-.072	.584
.602							-.004			.602
.620							-.001			.620
.638	-.029	-.058		-.032	.001				-.055	.638
.655							.001			.655
.673							-.000			.673
.691	-.014	-.062	-.054	-.042	-.025	-.012	.001	-.024	-.048	.691
.709							-.001			.709
.727							.000			.727
.745	-.002	-.053		-.041	-.010		.007		-.042	.745
.763							.004			.763
.781							-.002			.781
.799							-.000			.799
.817	.007	-.035	-.036	-.031	-.009	.003	.010	-.016	-.024	.817
.834							.004			.834
.852							.012			.852
.870							.014			.870
.888							.018			.888
.906							.014			.906
.921	-.134									.921
.924	.062	-.020		-.026	.003		.024		-.032	.924
.947							.020			.947
.964							.025			.964
.981	.057	.019	-.011		.014	.017	.018	-.002	.003	.981
1.000	-.145									1.000

Nose rake			Base rake		
Orifice station, y, in.	C_p top	C_p side	Orifice station, y, in.	C_p top	C_p side
.010	.453	.629	.031	.681	.523
.030	1.127	.986	.094	1.074	.882
.050	1.442	1.064	.156	1.280	1.202
.070	1.497	1.100	.219	1.348	1.465
.090	1.462	1.116	.281	1.362	1.549
.110	1.353	1.138	.344	1.378	1.523
.130	1.318	1.151	.406	1.388	1.518
.150	1.293	1.157	.469	1.402	1.523
.170	1.278	1.150	.750	1.417	
.190	1.197	1.055	1.000	1.431	
			1.250	1.434	
			1.500	1.438	

[redacted]

TABLE 16. - PRESSURE COEFFICIENTS FOR AN INTERCONTINENTAL BALLISTIC MISSILE FOR NOSE IV WITH NATURAL TRANSITION AT M = 1.57 - Concluded

(g) $\alpha = 10.1^{\circ}$

Model station, $\frac{x}{l}$	Cp for meridian angle, θ, deg –									Model station, $\frac{x}{l}$
	0	90	105	120	150	165	180	225	270	
.042							1.520			.042
.043							1.560			.043
.044							1.542			.044
.046							1.420			.046
.049							1.094			.049
.053							.832			.053
.060	-.369		-.257	-.218	-.171	-.145	-.137	-.191		.060
.075	-.308		-.045	.032	.149	.207	.193	.099		.075
.085	-.237	.051	.123	.210	.310	.333	.326	.233	-.005	.085
.096	-.122									.096
.126		.098	.152	.209	.303	.325	.339	.239	.078	.126
.143							-.052			.143
.154	-.182	-.171	-.137	-.098	-.036	-.016	-.005	-.077	-.187	.154
.171							.001			.171
.189							.013			.189
.206	-.081	-.156	-.120	-.090	-.010	.013	.020	-.049	-.162	.206
.223							.026			.223
.241							.019			.241
.258	-.031	-.160	-.128	-.084	-.004	.019	.018	-.051	-.165	.258
.275							.014			.275
.293							.013			.293
.310	-.011	-.168	-.139	-.091	-.014	.009	.019	-.057	-.165	.310
.327							.013			.327
.344							.006			.344
.362	-.000	-.131	-.144	-.104	-.024	.002	.010	-.068	-.122	.362
.379							.013			.379
.396	-.000	-.110	-.119	-.104	-.016	.007	.021	-.070	-.106	.396
.408							.009			.408
.426	.219	.077	.070	.088	.169	.212	.219	.121	.088	.426
.451	.146	.065	.071	.092	.164	.189	.204	.120	.069	.451
.476	.109	.048	.064	.093	.168	.195	.205	.130	.055	.476
.501	.079	.042	.069	.095	.162	.184	.196	.134	.042	.501
.530	-.107	-.127	-.112	-.089	-.030	-.015	-.008	-.058	-.131	.530
.548							.009			.548
.566							.022			.566
.584	-.053	-.112	-.094	-.067	-.005	.012	.023	-.035	-.119	.584
.602							.028			.602
.620							.035			.620
.638	-.030	-.106		-.054	.004				-.100	.638
.655							.033			.655
.673							.027			.673
.691	-.020	-.120	-.104	-.070	-.017	.009	.031	-.033	-.101	.691
.709							.026			.709
.727							.035			.727
.745	-.012	-.112		-.071	-.002		.027		-.092	.745
.763							.028			.763
.781							.012			.781
.799							.024			.799
.817	-.000	-.092	-.093	-.073	-.004	.023	.036	-.033	-.073	.817
.834							.026			.834
.852							.037			.852
.870							.033			.870
.888							.039			.888
.906							.036			.906
.921	-.179									.921
.924	.040	-.062		-.067	.001		.041		-.069	.924
.947							.039			.947
.964							.045			.964
.981	.037	-.011	-.060		.012	.029	.037	-.014	-.027	.981
1.000	-.189									1.000

Nose rake			Base rake		
Orifice station, y, in.	C_p top	C_p side	Orifice station, y, in.	C_p top	C_p side
.010	.208	.481	.031	.884	.461
.030	.848	.918	.094	1.469	1.012
.050	1.311	1.045	.156	1.432	1.472
.070	1.426	1.079	.219	1.399	1.624
.090	1.407	1.097	.281	1.414	1.577
.110	1.289	1.119	.344	1.402	1.518
.130	1.229	1.137	.406	1.400	1.522
.150	1.196	1.146	.469	1.402	1.523
.170	1.182	1.150	.750	1.390	
.190	1.103	1.092	1.000	1.404	
			1.250	1.416	
			1.500	1.436	

[redacted]

TABLE 17. - PRESSURE COEFFICIENTS FOR AN INTERCONTINENTAL BALLISTIC MISSILE FOR NOSE IV WITH NATURAL TRANSITION AT M = 2.29

(a) $\alpha = -10.1^{\circ}$

Model station, $\frac{x}{l}$	Cp for meridian angle, θ, deg –									Model station, $\frac{x}{l}$
	0	90	105	120	150	165	180	225	270	
.042							1.639			.042
.043							1.548			.043
.044							1.404			.044
.046							1.134			.046
.049							.328			.049
.053							.439			.053
.060	.057	-.072	-.094	-.109	-.116	-.135	-.141	-.115		.060
.075	.210	.014	-.019	-.052	-.088	-.092	-.091	-.074		.075
.085	.264	.066	.021	-.014	-.060	-.063	-.063	-.047	.047	.085
.096	.303									.096
.126		.085	.050	.023	-.009	-.018	-.022	.005	.077	.126
.143							-.136			.143
.154	.037	-.076	-.097	-.112	-.124		-.119	-.120	-.081	.154
.171							-.104			.171
.189							-.091			.189
.206	.040	-.079	-.098	-.109	-.095	-.081	-.077	-.103	-.083	.206
.223							-.064			.223
.241							-.054			.241
.258	.033	-.091	-.109	-.114	-.069	-.052	-.045	-.088	-.090	.258
.275							-.037			.275
.293							-.035			.293
.310	.033	-.103	-.122	-.110	-.055	-.042	-.030	-.064	-.104	.310
.327							-.027			.327
.344							-.024			.344
.362	.030	-.114	-.132	-.076	-.055	-.036	-.022	-.056	-.115	.362
.379							-.020			.379
.396	.027	-.121	-.118	-.067	-.061	-.034	-.014	-.055	-.122	.396
.408							-.016			.408
.426	.164	-.058	-.006	.004	-.002	.077	.088	.011	-.057	.426
.451	.167	-.053	-.005	.010	-.002	.052	.089	.016	-.051	.451
.476	.166	-.047	-.002	.013	-.012	.044	.059	.016	-.040	.476
.501	.166		-.001	.011	-.022	.036	.043		-.022	.501
.530	.022	-.103	-.089	-.060	-.101		-.058	-.057	-.097	.530
.548							-.057			.548
.566							-.058			.566
.584	.026	-.095	-.074	-.060	-.090	-.053	-.046	-.061	-.090	.584
.602							-.040			.602
.620							-.035			.620
.638	.024	-.091		-.063	-.068		-.031		-.090	.638
.655							-.029			.655
.673							-.028			.673
.691	.022	-.094	-.082		-.052	-.040		-.050	-.090	.691
.709							-.029			.709
.727							-.029			.727
.745	.026	-.092		-.052	-.046		-.028		-.091	.745
.763							-.028			.763
.781							-.032			.781
.799							-.032			.799
.817	.024	-.099	-.058	-.046	-.047	-.041	-.026	-.038	-.092	.817
.834							-.029			.834
.870							-.028			.870
.888							-.029			.888
.921	-.166									.921
.924	.024	-.076		-.043			-.026			.924
.947							-.027			.947
.964							-.028			.964
.981	.045	-.063	-.041		-.043	-.043	-.028	-.036	-.063	.981
.984					-.046				-.075	.984
.998							-.030			.998
1.000	-.168									1.000

Nose rake			Base rake		
Orifice station, y, in.	Cp top	Cp side	Orifice station, y, in.	Cp top	Cp side
.010	1.198	.654	.031	.781	.257
.030	1.563	1.069	.094	1.711	.818
.050	1.663	1.150	.156	1.723	1.302
.070	1.657	1.170	.219	1.744	1.391
.090	1.624	1.184	.281	1.746	1.437
.110	1.615	1.195	.344	1.748	1.453
.130	1.620	1.207	.406	1.748	1.462
.150	1.615	1.207	.469	1.750	1.470
.170	1.599	1.153	.750	1.751	
.190	1.541	1.031	1.000	1.756	
			1.250	1.741	
			1.500	1.627	

[redacted]

TABLE 17. - PRESSURE COEFFICIENTS FOR AN INTERCONTINENTAL BALLISTIC MISSILE FOR NOSE IV WITH NATURAL TRANSITION AT M = 2.29 - Continued

(b) $\alpha = -6.3^{\circ}$

Model station, $\frac{x}{l}$	Cp for meridian angle, θ, deg –									Model station, $\frac{x}{l}$
	0	90	105	120	150	165	180	225	270	
.042							1.666			.042
.043							1.598			.043
.044							1.471			.044
.046							1.207			.046
.049							.483			.049
.053							.640			.053
.060	-.000	-.068	-.082	-.091	-.094	-.096	-.105	-.093		.060
.075	.124	.014	-.006	-.028	-.050	-.056	-.056	-.034		.075
.085	.178	.065	.041	.015	-.015	-.020	-.021	-.008	.058	.085
.096	.237									.096
.126		.089	.072	.055	.025	.022	.017	.043	.087	.126
.143							-.116			.143
.154	-.006	-.068	-.080	-.090	-.103		-.103	-.099	-.068	.154
.171							-.092			.171
.189							-.081			.189
.206	.000	-.061	-.068	-.077	-.074	-.070	-.069	-.076	-.062	.206
.223							-.060			.223
.241							-.053			.241
.258	-.001	-.059	-.066	-.067	-.052	-.047	-.048	-.058	-.058	.258
.275							-.040			.275
.293							-.036			.293
.310	-.002	-.062	-.066	-.058	-.041	-.033	-.031	-.044	-.060	.310
.327							-.027			.327
.344							-.025			.344
.362	-.003	-.064	-.061	-.049	-.031	-.025	-.023	-.035	-.059	.362
.379							-.021			.379
.396	-.005	-.062	-.058	-.046	-.027	-.023	-.017	-.031	-.057	.396
.408							-.018			.408
.426	.117	.032	.046	.053	.061	.072	.079	.056	.039	.426
.451	.115	.037	.043	.047	.058	.062	.070	.053	.041	.451
.476	.115	.039	.039	.042	.047	.053	.057	.046	.041	.476
.501	.116		.036	.036	.038	.043	.047		.039	.501
.530	-.010	-.059	-.060	-.059	-.047		-.053	-.049	-.059	.530
.548							-.049			.548
.566							-.042			.566
.584	-.006	-.054	-.053	-.046	-.043	-.042	-.038	-.042	-.053	.584
.602							-.035			.602
.620							-.033			.620
.638	-.004	-.051		-.042	-.036		-.030		-.051	.638
.655							-.026			.655
.673							-.024			.673
.691	-.002	-.052	-.050		-.031	-.030		-.032	-.050	.691
.709							-.020			.709
.727							-.017			.727
.745	-.001	-.048		-.035	-.026		-.015		-.047	.745
.763							-.018			.763
.781							-.015			.781
.799							-.009			.799
.817	.003	-.048	-.040	-.029	-.022	-.018	-.011	-.020	-.043	.817
.834							-.011			.834
.870							-.010			.870
.888							-.009			.888
.921	-.150									.921
.924	.001	-.042		-.025			-.010			.924
.947							-.010			.947
.964							-.008			.964
.981	.018	-.037	-.027		-.019	-.018	-.010	-.018	-.032	.981
.984					-.022				-.038	.984
.998							-.012			.998
1.000	-.151									1.000

Nose rake			Base rake		
Orifice station, y, in.	Cp top	Cp side	Orifice station, y, in.	Cp top	Cp side
.010	1.021	.758	.031	.616	.342
.030	1.483	1.104	.094	1.264	.766
.050	1.588	1.160	.156	1.478	1.071
.070	1.586	1.176	.219	1.599	1.242
.090	1.558	1.189	.281	1.615	1.384
.110	1.549	1.191	.344	1.625	1.440
.130	1.549	1.180	.406	1.634	1.461
.150	1.544	1.138	.469	1.639	1.480
.170	1.528	1.085	.750	1.655	
.190	1.462	1.075	1.000	1.656	
			1.250	1.663	
			1.500	1.559	

[redacted]

TABLE 17. - PRESSURE COEFFICIENTS FOR AN INTERCONTINENTAL BALLISTIC MISSILE FOR NOSE IV WITH NATURAL TRANSITION AT M = 2.29 - Continued

(c) $\alpha = -3.0^{\circ}$

Model station, $\frac{x}{l}$	Cp for meridian angle, θ, deg –									Model station, $\frac{x}{l}$
	0	90	105	120	150	165	180	225	270	
.042							1.674			.042
.043							1.635			.043
.044							1.527			.044
.046							1.280			.046
.049							.707			.049
.053							.758			.053
.060	-.038	-.065	-.072	-.074	-.080	-.081	-.083	-.073		.060
.075	.062	.014	.008	-.002	-.015	-.020	-.023	-.005		.075
.085	.111	.066	.058	.044	.025	.021	.019	.026	.070	.085
.096	.169									.096
.126		.096	.089	.076	.060	.059	.058	.070	.093	.126
.143							-.096			.143
.154	-.039	-.063	-.071	-.076	-.082		-.084	-.081	-.065	.154
.171							-.076			.171
.189							-.068			.189
.206	-.027	-.050	-.053	-.058	-.059	-.062	-.061	-.059	-.050	.206
.223							-.055			.223
.241							-.050			.241
.258	-.025	-.041	-.045	-.046	-.043	-.043	-.046	-.043	-.038	.258
.275							-.040			.275
.293							-.037			.293
.310	-.022	-.036	-.037	-.037	-.035	-.033	-.032	-.032	-.034	.310
.327							-.029			.327
.344							-.027			.344
.362	-.018	-.035	-.033	-.032	-.028	-.026	-.025	-.025	-.029	.362
.379							-.023			.379
.396	-.019	-.032	-.032	-.029	-.024	-.022	-.018	-.023	-.027	.396
.408							-.019			.408
.426	.097	.073	.077	.076	.078	.081	.080	.079	.077	.426
.451	.092	.070	.070	.070	.074	.073	.073	.072	.072	.451
.476	.089	.065	.063	.064	.063	.064	.065	.065	.067	.476
.501	.086		.059	.057	.057	.057	.058		.063	.501
.530	-.027	-.041	-.044	-.044	-.043		-.043	-.040	-.041	.530
.548							-.038			.548
.566							-.035			.566
.584	-.020	-.034	-.034	-.034	-.036	-.037	-.035	-.032	-.032	.584
.602							-.034			.602
.620							-.029			.620
.638	-.018	-.028		-.030	-.029		-.023		-.027	.638
.655							-.020			.655
.673							-.019			.673
.691	-.015	-.029	-.031		-.024	-.021		-.022	-.026	.691
.709							-.017			.709
.727							-.016			.727
.745	-.013	-.025		-.021	-.018		-.015		-.023	.745
.763							-.012			.763
.781							-.013			.781
.799							-.013			.799
.817	-.010	-.021	-.020	-.016	-.016	-.013	-.011	-.012	-.013	.817
.834							-.012			.834
.870							-.009			.870
.888							-.007			.888
.921	-.128									.921
.924	-.004	-.017		-.018			-.006			.924
.947							-.007			.947
.964							-.005			.964
.981	.000	-.014	-.013		-.009	-.006	-.007	-.009	-.007	.981
.984					-.013				-.014	.984
.998							-.017			.998
1.000	-.131									1.000

Nose rake			Base rake		
Orifice station, y, in.	C_p top	C_p side	Orifice station, y, in.	C_p top	C_p side
.010	.898	.818	.031	.436	.319
.030	1.370	1.128	.094	.809	.546
.050	1.495	1.169	.156	1.024	.734
.070	1.497	1.187	.219	1.202	.876
.090	1.481	1.197	.281	1.342	1.011
.110	1.483	1.199	.344	1.408	1.139
.130	1.483	1.187	.406	1.442	1.249
.150	1.477	1.101	.469	1.464	1.309
.170	1.462	1.094	.750	1.530	
.190	1.403	1.082	1.000	1.563	
			1.250	1.598	
			1.500	1.513	

[redacted]

TABLE 17. - PRESSURE COEFFICIENTS FOR AN INTERCONTINENTAL BALLISTIC MISSILE FOR NOSE IV WITH NATURAL TRANSITION AT M = 2.29 - Continued

(d) $\alpha = 0^{\circ}$

Model station, $\frac{x}{l}$	Cp for meridian angle, θ, deg –									Model station, $\frac{x}{l}$
	0	90	105	120	150	165	180	225	270	
.042							1.678			.042
.043							1.659			.043
.044							1.569			.044
.046							1.347			.046
.049							.896			.049
.053							.813			.053
.060	-.065	-.065	-.065	-.062	-.060	-.060	-.060	-.056		.060
.075	.013	.015	.017	.018	.019	.017	.016	.017		.075
.085	.059	.066	.070	.067	.065	.065	.063	.062	.074	.085
.096	.108									.096
.126		.097	.096	.099	.095	.097	.099	.098	.095	.126
.143							-.074			.143
.154	-.065	-.064	-.064	-.063	-.064		-.064	-.064	-.065	.154
.171							-.058			.171
.189							-.053			.189
.206	-.050	-.048	-.047	-.049	-.047	-.048	-.048	-.047	-.046	.206
.223							-.044			.223
.241							-.041			.241
.258	-.039	-.037	-.036	-.036	-.036	-.036	-.039	-.035	-.033	.258
.275							-.036			.275
.293							-.035			.293
.310	-.031	-.032	-.032	-.031	-.032	-.030	-.031	-.027	-.027	.310
.327							-.028			.327
.344							-.028			.344
.362	-.027	-.029	-.026	-.027	-.028	-.027	-.027	-.022	-.022	.362
.379							-.026			.379
.396	-.024	-.025	-.026	-.026	-.025	-.024	-.021	-.021	-.020	.396
.408							-.023			.408
.426	.084	.080	.083	.082	.083	.084	.084	.086	.084	.426
.451	.079	.076	.077	.078	.082	.078	.081	.080	.078	.451
.476	.073	.071	.070	.072	.074	.074	.076	.076	.073	.476
.501	.067		.067	.067	.069	.069	.070		.068	.501
.530	-.038	-.037	-.037	-.038	-.037		-.038	-.036	-.035	.530
.548							-.035			.548
.566							-.033			.566
.584	-.030	-.030	-.028	-.029	-.034	-.035	-.032	-.030	-.026	.584
.602							-.026			.602
.620							-.024			.620
.638	-.025	-.026		-.027	-.021		-.020		-.023	.638
.655							-.019			.655
.673							-.019			.673
.691	-.021	-.025	-.024		-.023	-.023		-.019	-.020	.691
.709							-.016			.709
.727							-.014			.727
.745	-.018	-.017		-.018	-.016		-.015		-.014	.745
.763							-.015			.763
.781							-.018			.781
.799							-.016			.799
.817	-.014	-.016	-.016	-.015	-.016	-.015	-.012	-.011	-.007	.817
.834							-.013			.834
.870							-.009			.870
.888							-.008			.888
.921	-.120									.921
.924	-.008	-.014		-.017			-.007			.924
.947							-.007			.947
.964							-.005			.964
.981	.003	-.009	-.012		-.010	-.007	-.008	-.005	-.004	.981
.984					-.013				-.009	.984
.998							-.013			.998
1.000	-.123									1.000

Nose rake			Base rake		
Orifice station, y, in.	Cp top	Cp side	Orifice station, y, in.	Cp top	Cp side
.010	.784	.830	.031	.306	.302
.030	1.251	1.127	.094	.504	.486
.050	1.382	1.167	.156	.644	.626
.070	1.389	1.188	.219	.757	.756
.090	1.389	1.195	.281	.850	.863
.110	1.394	1.200	.344	.955	.968
.130	1.396	1.180	.406	1.057	1.081
.150	1.394	1.089	.469	1.143	1.175
.170	1.382	1.097	.750	1.323	
.190	1.320	1.080	1.000	1.381	
			1.250	1.421	
			1.500	1.365	

[redacted]

TABLE 17. - PRESSURE COEFFICIENTS FOR AN INTERCONTINENTAL BALLISTIC MISSILE FOR NOSE IV WITH NATURAL TRANSITION AT M = 2.29 - Continued

(e) $\alpha = 3.0^{\circ}$

Model station, $\frac{x}{l}$	Cp for meridian angle, θ, deg –									Model station, $\frac{x}{l}$
	0	90	105	120	150	165	180	225	270	
.042							1.682			.042
.043							1.680			.043
.044							1.612			.044
.046							1.420			.046
.049							1.017			.049
.053							.866			.053
.060	-.085	-.065	-.058	-.047	-.034	-.030	-.029	-.034		.060
.075	-.026	.015	.031	.042	.063	.067	.067	.049		.075
.085	.014	.068	.084	.094	.113	.119	.120	.101	.073	.085
.096	.069									.096
.126		.098	.110	.119	.137	.143	.147	.129	.094	.126
.143							-.047			.143
.154	-.085	-.065	-.059	-.050	-.042		-.034	-.048	-.064	.154
.171							-.032			.171
.189							-.029			.189
.206	-.061	-.050	-.045	-.041	-.029	-.027	-.027	-.035	-.049	.206
.223							-.024			.223
.241							-.024			.241
.258	-.043	-.042	-.036	-.033	-.024	-.022	-.024	-.029	-.038	.258
.275							-.022			.275
.293							-.022			.293
.310	-.030	-.039	-.036	-.032	-.025	-.022	-.021	-.025	-.035	.310
.327							-.021			.327
.344							-.020			.344
.362	-.023	-.037	-.035	-.030	-.023	-.019	-.018	-.022	-.031	.362
.379							-.019			.379
.396	-.020	-.033	-.034	-.031	-.022	-.019	-.015	-.023	-.028	.396
.408							-.017			.408
.426	.079	.070	.076	.078	.088	.095	.096	.086	.074	.426
.451	.073	.068	.071	.076	.091	.091	.095	.083	.070	.451
.476	.064	.064	.067	.073	.086	.090	.092	.082	.067	.476
.501	.057		.066	.069	.082	.085	.087		.062	.501
.530	-.042	-.042	-.041	-.038	-.032		-.030	-.033	-.041	.530
.548							-.025			.548
.566							-.019			.566
.584	-.032	-.036	-.034	-.032	-.025	-.022	-.018	-.025	-.033	.584
.602							-.016			.602
.620							-.016			.620
.638	-.025	-.033		-.024	-.017		-.014		-.028	.638
.655							-.012			.655
.673							-.010			.673
.691	-.019	-.031	-.028		-.019	-.016		-.017	-.026	.691
.709							-.013			.709
.727							-.012			.727
.745	-.016	-.023		-.023	-.017		-.011		-.020	.745
.763							-.010			.763
.781							-.014			.781
.799							-.013			.799
.817	-.011	-.024	-.022	-.021	-.015	-.011	-.006	-.013	-.016	.817
.834							-.009			.834
.870							-.005			.870
.888							-.005			.888
.921	-.124									.921
.924	-.008	-.020		-.022			-.003			.924
.947							-.005			.947
.964							.000			.964
.981	.004	-.017	-.016		-.006	-.003	-.004	-.004	-.010	.981
.984					-.013				-.017	.984
.998							-.007			.998
1.000	-.129									1.000

Nose rake			Base rake		
Orifice station, y, in.	Cp top	Cp side	Orifice station, y, in.	Cp top	Cp side
.010	.563	.824	.031	.246	.335
.030	1.234	1.129	.094	.378	.592
.050	1.417	1.167	.156	.470	.805
.070	1.406	1.188	.219	.558	.958
.090	1.345	1.196	.281	.624	1.093
.110	1.319	1.198	.344	.688	1.222
.130	1.301	1.174	.406	.749	1.310
.150	1.295	1.091	.469	.801	1.348
.170	1.279	1.095	.750	1.019	
.190	1.216	1.077	1.000	1.180	
			1.250	1.237	
			1.500	1.183	

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TABLE 17. - PRESSURE COEFFICIENTS FOR AN INTERCONTINENTAL BALLISTIC MISSILE FOR NOSE IV WITH NATURAL TRANSITION AT M = 2.29 - Continued

(f) $\alpha = 6.3^{\circ}$

Model station, $\frac{x}{l}$	Cp for meridian angle, θ, deg – 0	90	105	120	150	165	180	225	270	Model station, $\frac{x}{l}$
.042							2.238			.042
.043							1.667			.043
.044							1.688			.044
.046							1.645			.046
.049							1.492			.049
.053							1.117			.053
.060	-.107	-.068	-.053	-.032	-.001	.006	.011	-.009		.060
.075	-.056	.015	.045	.070	.119	.129	.130	.091		.075
.085	-.022	.067	.098	.127	.172	.186	.190	.147	.058	.085
.096	.011									.096
.126		.091	.117	.141	.187	.197	.204	.165	.086	.126
.143							-.013			.143
.154	-.106	-.071	-.056	-.040	-.014		.000	-.028	-.067	.154
.171							.001			.171
.189							.002			.189
.206	-.068	-.063	-.049	-.036	-.006	.000	.001	-.022	-.062	.206
.223							.003			.223
.241							.001			.241
.258	-.044	-.061	-.050	-.036	-.007	.000	.000	-.022	-.059	.258
.275							-.000			.275
.293							-.001			.293
.310	-.028	-.067	-.056	-.040	-.012	-.001	.001	-.023	-.063	.310
.327							.000			.327
.344							.000			.344
.362	-.020	-.070	-.060	-.044	-.015	-.004	.000	-.025	-.064	.362
.379							-.000			.379
.396	-.018	-.067	-.063	-.047	-.015	-.005	.000	-.028	-.062	.396
.408							-.002			.408
.426	.080	.029	.036	.054	.098	.116	.121	.080	.032	.426
.451	.071	.034	.037	.054	.102	.114	.120	.081	.037	.451
.476	.058	.036	.039	.056	.099	.113	.118	.082	.039	.476
.501	.047		.043	.056	.092	.104	.111		.037	.501
.530	-.051	-.061	-.058	-.050	-.022		-.007	-.035	-.060	.530
.548							-.003			.548
.566							-.000			.566
.584	-.039	-.059	-.050	-.041	-.015	-.007	-.002	-.024	-.056	.584
.602							-.001			.602
.620							-.001			.620
.638	-.028	-.056		-.035	-.010		.002		-.052	.638
.655							.000			.655
.673							-.001			.673
.691	-.023	-.056	-.050		-.018	-.007		-.023	-.052	.691
.709							.000			.709
.727							.001			.727
.745	-.017	-.052		-.040	-.013		.001		-.050	.745
.763							.002			.763
.781							-.001			.781
.799							.000			.799
.817	-.011	-.052	-.049	-.039	-.011	.000	.005	-.019	-.044	.817
.834							.003			.834
.870							.006			.870
.888							.008			.888
.921	-.147									.921
.924	-.011	-.045		-.041			.007			.924
.947							.005			.947
.964							.008			.964
.981	.000	-.039	-.044		-.010	.001	.004	-.013	-.035	.981
.984					-.011				-.042	.984
.998							.003			.998
1.000	-.150									1.000

Nose rake			Base rake		
Orifice station, y, in.	Cp top	Cp side	Orifice station, y, in.	Cp top	Cp side
.010	.500	.812	.031	.473	.351
.030	1.045	1.127	.094	.952	.819
.050	1.198	1.168	.156	1.047	1.137
.070	1.211	1.183	.219	1.084	1.301
.090	1.214	1.192	.281	1.092	1.424
.110	1.220	1.197	.344	1.104	1.461
.130	1.218	1.171	.406	1.108	1.481
.150	1.215	1.088	.469	1.112	2.234
.170	1.198	1.094	.750	1.133	
.190	1.151	1.071	1.000	1.158	
			1.250	1.181	
			1.500	1.107	

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TABLE 17. - PRESSURE COEFFICIENTS FOR AN INTERCONTINENTAL BALLISTIC MISSILE FOR NOSE IV WITH NATURAL TRANSITION AT M = 2.29 - Concluded

(g) $\alpha = 10.1^{\circ}$

Model station, $\frac{x}{l}$	Cp for meridian angle, θ, deg –									Model station, $\frac{x}{l}$
	0	90	105	120	150	165	180	225	270	
.042							1.640			.042
.043							1.681			.043
.044							1.667			.044
.046							1.545			.046
.049							1.217			.049
.053							.991			.053
.060	-.143	-.072	-.047	-.012	.045	.063	.072	.026		.060
.075	-.091	.013	.061	.106	.192	.213	.218	.148		.075
.085	-.074	.067	.116	.167	.246	.272	.280	.207	.044	.085
.096	-.038									.096
.126		.079	.124	.171	.246	.267	.281	.224	.078	.126
.143							.029			.143
.154	-.120	-.079	-.056	-.024	.022		.049	-.004	-.081	.154
.171							.049			.171
.189							.048			.189
.206	-.071	-.082	-.058	-.030	.025	.039	.047	-.000	-.082	.206
.223							.046			.223
.241							.043			.241
.258	-.043	-.096	-.070	-.038	.020	.037	.040	-.008	-.090	.258
.275							.038			.275
.293							.036			.293
.310	-.027	-.109	-.081	-.047	.012	.031	.039	-.013	-.105	.310
.327							.038			.327
.344							.037			.344
.362	-.018	-.122	-.092	-.054	.007	.028	.036	-.017	-.118	.362
.379							.034			.379
.396	-.016	-.128	-.098	-.061	.006	.026	.037	-.022	-.124	.396
.408							.032			.408
.426	.086	-.068	-.017	.031	.127	.161	.173	.091	-.062	.426
.451	.088	-.060	-.017	.034	.134	.160	.173	.091	-.058	.451
.476	.060	-.055	-.017	.034	.133	.162	.174	.094	-.051	.476
.501	.044		-.014	.034	.132	.160	.172		-.039	.501
.530	-.056	-.109	-.101	-.067	.000		.027	-.029	-.106	.530
.548							.029			.548
.566							.032			.566
.584	-.050	-.101	-.099	-.064	.001	.021	.029	-.026	-.098	.584
.602							.030			.602
.620							.027			.620
.638	-.033	-.097		-.064	-.000		.025		-.095	.638
.655							.024			.655
.673							.028			.673
.691	-.032	-.102	-.100		-.003	.020		-.029	-.097	.691
.709							.031			.709
.727							.032			.727
.745	-.031	-.099		-.071	-.000		.031		-.093	.745
.763							.032			.763
.781							.026			.781
.799							.022			.799
.817	-.030	-.104	-.095	-.068	-.003	.019	.030	-.031	-.093	.817
.834							.025			.834
.870							.029			.870
.888							.028			.888
.921	-.165									.921
.924	-.030	-.076		-.071			.030			.924
.947							.027			.947
.964							.031			.964
.981	-.018	-.064	-.103		-.001	.019	.026	-.024	-.065	.981
.984					-.004				-.077	.984
.998							.028			.998
1.000	-.169									1.000

Nose rake			Base rake		
Orifice station, y, in.	Cp top	Cp side	Orifice station, y, in.	Cp top	Cp side
.010	.228	.784	.031	.576	.237
.030	.751	1.239	.094	1.235	.816
.050	1.084	1.201	.156	1.086	1.342
.070	1.170	1.193	.219	1.094	1.395
.090	1.152	1.199	.281	1.093	1.438
.110	1.111	1.201	.344	1.086	1.447
.130	1.092	1.193	.406	1.089	1.458
.150	1.086	1.093	.469	1.086	1.462
.170	1.071	1.093	.750	1.082	
.190	1.015	1.086	1.000	1.102	
			1.250	1.122	
			1.500	1.081	

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TABLE 18. - PRESSURE COEFFICIENTS FOR AN INTERCONTINENTAL BALLISTIC MISSILE FOR NOSE IV WITH NATURAL TRANSITION AT M = 2.98

(a) $\alpha = -10.1^{\circ}$

Model station, $\frac{x}{l}$	Cp for meridian angle, θ, deg –									Model station, $\frac{x}{l}$
	0	90	105	120	150	165	180	225	270	
.042							1.708			.042
.043							1.623			.043
.044							1.480			.044
.046							1.206			.046
.049							.403			.049
.053							.456			.053
.060	.136	.012	-.006	-.020	-.042	-.055	-.057	-.024		.060
.075	.226	.061	.034	.011	-.019	-.028	-.030	-.003		.075
.085	.259	.094	.066	.034	-.000	-.008	-.010	.010	.079	.085
.096	.309									.096
.126		.083	.055	.035	.008	.005	.008	.021	.083	.126
.143							-.076			.143
.154	.061	-.033	-.049	-.061	-.071		-.070	-.068	-.034	.154
.171							-.065			.171
.189							-.059			.189
.206	.054	-.042	-.056	-.064	-.058	-.051	-.050	-.064	-.041	.206
.223							-.041			.223
.241							-.034			.241
.258	.047	-.050	-.064	-.071	-.046	-.035	-.031	-.060	-.047	.258
.275							-.027			.275
.293							-.025			.293
.310	.043	-.060	-.073	-.077	-.038	-.029	-.023	-.051	-.062	.310
.327							-.022			.327
.344							-.020			.344
.362	.042	-.068	-.082	-.070	-.034	-.026	-.019	-.046	-.070	.362
.379							-.018			.379
.396	.039	-.073	-.086	-.063	-.037	-.026	-.015	-.048	-.075	.396
.408							-.016			.408
.426	.147	-.033	-.038	-.018	.002	.030	.046	-.010	-.034	.426
.451	.159	-.029	-.043	-.005	.004	.027	.054	-.007	-.028	.451
.476	.165	-.026	-.040	-.002	-.007	.020	.041	-.005	-.024	.476
.501	.168		-.037	-.000	-.012	.015	.030		-.022	.501
.530	.045	-.073	-.075	-.046	-.058		-.038	-.037	-.073	.530
.548							-.038			.548
.566							-.036			.566
.584	.045	-.078	-.066	-.051	-.060	-.039	-.035	-.043	-.076	.584
.602							-.027			.602
.620							-.026			.620
.638	.044	-.078		-.050	-.049		-.024		-.079	.638
.655							-.023			.655
.673							-.022			.673
.691	.042	-.082	-.061		-.041	-.035		-.047	-.083	.691
.709							-.023			.709
.727							-.023			.727
.745	.043	-.073		-.044	-.044		-.023		-.084	.745
.763							-.023			.763
.781							-.026			.781
.799							-.026			.799
.817	.042	-.076	-.046	-.042	-.049	-.036	-.024	-.040	-.079	.817
.834							-.027			.834
.870							-.024			.870
.888							-.026			.888
.921	-.111									.921
.924	.040	-.053		-.041			-.025			.924
.947							-.026			.947
.964							-.024			.964
.981	.056	-.045	-.038		-.050	-.047	-.025	-.042	-.041	.981
.984					-.051				-.051	.984
.998							-.026			.998
1.000	-.111									1.000

Nose rake			Base rake		
Orifice station, y, in.	C_p top	C_p side	Orifice station, y, in.	C_p top	C_p side
.010	1.050	.820	.031	.744	.108
.030	1.463	1.179	.094	1.702	.390
.050	1.590	1.208	.156	1.907	.914
.070	1.613	1.220	.219	1.949	1.150
.090	1.633	1.229	.281	1.953	1.321
.110	1.651	1.217	.344	1.960	1.375
.130	1.661	1.150	.406	1.960	1.402
.150	1.669	1.118	.469	1.964	1.412
.170	1.663	1.139	.750	1.936	
.190	1.611	1.124	1.000	1.937	
			1.250	1.926	
			1.500	1.822	

[redacted]

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TABLE 18. - PRESSURE COEFFICIENTS FOR AN INTERCONTINENTAL BALLISTIC MISSILE FOR NOSE IV WITH NATURAL TRANSITION AT $M = 2.98$ - Continued

(b) $\alpha = -6.3^{\circ}$

Model station, $\frac{x}{l}$	Cp for meridian angle, θ, deg –									Model station, $\frac{x}{l}$
	0	90	105	120	150	165	180	225	270	
.042							1.742			.042
.043							1.671			.043
.044							1.545			.044
.046							1.286			.046
.049							.509			.049
.053							.607			.053
.060	.085	.018	.005	-.002	-.016	-.022	-.026	-.004		.060
.075	.157	.063	.047	.028	.009	.003	.002	.021		.075
.085	.188	.096	.081	.059	.032	.027	.026	.043	.095	.085
.096	.235									.096
.126		.089	.072	.056	.036	.033	.034	.044	.090	.126
.143							-.066			.143
.154	.020	-.030	-.039	-.049	-.057		-.059	-.053	-.028	.154
.171							-.055			.171
.189							-.049			.189
.206	.018	-.032	-.041	-.044	-.046	-.045	-.045	-.046	-.032	.206
.223							-.040			.223
.241							-.035			.241
.258	.013	-.037	-.043	-.045	-.037	-.030	-.031	-.041	-.032	.258
.275							-.028			.275
.293							-.027			.293
.310	.011	-.039	-.044	-.043	-.030	-.024	-.025	-.036	-.038	.310
.327							-.023			.327
.344							-.021			.344
.362	.009	-.042	-.045	-.040	-.024	-.020	-.019	-.029	-.040	.362
.379							-.017			.379
.396	.007	-.044	-.045	-.037	-.019	-.014	-.015	-.026	-.042	.396
.408							-.014			.408
.426	.098	.009	.016	.025	.040	.047	.049	.035	.015	.426
.451	.102	.015	.017	.026	.046	.043	.048	.035	.020	.451
.476	.107	.019	.019	.024	.034	.037	.040	.032	.023	.476
.501	.111		.020	.022	.029	.031	.033		.027	.501
.530	.014	-.041	-.042	-.037	-.029		-.029	-.031	-.038	.530
.548							-.028			.548
.566							-.025			.566
.584	.012	-.041	-.040	-.035	-.026	-.026	-.023	-.027	-.038	.584
.602							-.020			.602
.620							-.018			.620
.638	.011	-.042		-.032	-.023		-.015		-.039	.638
.655							-.014			.655
.673							-.013			.673
.691	.009	-.042	-.038		-.019	-.016		-.022	-.041	.691
.709							-.012			.709
.727							-.011			.727
.745	.011	-.035		-.024	-.017		-.011		-.041	.745
.763							-.010			.763
.781							-.012			.781
.799							-.011			.799
.817	.011	-.037	-.028	-.020	-.015	-.013	-.008	-.017	-.039	.817
.834							-.009			.834
.870							-.007			.870
.888							-.006			.888
.921	-.106									.921
.924	.012	-.033		-.018			-.006			.924
.947							-.007			.947
.964							-.005			.964
.981	.022	-.031	-.022		-.015	-.011	-.007	-.014	-.032	.981
.984					-.016				-.037	.984
.998							-.007			.998
1.000	-.105									1.000

Nose rake			Base rake		
Orifice station, y, in.	C_p top	C_p side	Orifice station, y, in.	C_p top	C_p side
.010	.912	.855	.031	.538	.251
.030	1.353	1.176	.094	1.203	.658
.050	1.489	1.201	.156	1.466	.902
.070	1.513	1.224	.219	1.653	1.110
.090	1.526	1.226	.281	1.693	1.293
.110	1.537	1.206	.344	1.711	1.374
.130	1.544	1.127	.406	1.725	1.410
.150	1.546	1.122	.469	1.739	1.438
.170	1.535	1.141	.750	1.761	
.190	1.481	1.128	1.000	1.774	
			1.250	1.781	
			1.500	1.676	

[redacted]

TABLE 18. - PRESSURE COEFFICIENTS FOR AN INTERCONTINENTAL BALLISTIC MISSILE FOR NOSE IV WITH NATURAL TRANSITION AT M = 2.98 - Continued

(c) $\alpha = -3.0^{\circ}$

Model station, $\frac{x}{l}$	Cp for meridian angle, θ, deg –									Model station, $\frac{x}{l}$
	0	90	105	120	150	165	180	225	270	
.042							1.748			.042
.043							1.700			.043
.044							1.596			.044
.046							1.350			.046
.049							.662			.049
.053							.751			.053
.060	.049	.019	.013	.012	.007	.004	.001	.012		.060
.075	.107	.064	.059	.048	.040	.035	.035	.045		.075
.085	.135	.097	.093	.080	.065	.063	.061	.072	.100	.085
.096	.176									.096
.126		.091	.083	.075	.064	.060	.062	.068	.093	.126
.143							-.051			.143
.154	-.008	-.028	-.031	-.036	-.042		-.045	-.039	-.026	.154
.171							-.042			.171
.189							-.039			.189
.206	-.005	-.027	-.030	-.034	-.035	-.035	-.037	-.034	-.026	.206
.223							-.035			.223
.241							-.034			.241
.258	-.007	-.025	-.030	-.030	-.030	-.031	-.033	-.030	-.020	.258
.275							-.032			.275
.293							-.030			.293
.310	-.008	-.024	-.026	-.026	-.025	-.023	-.028	-.025	-.023	.310
.327							-.024			.327
.344							-.022			.344
.362	-.008	-.023	-.024	-.023	-.020	-.020	-.021	-.021	-.021	.362
.379							-.019			.379
.396	-.009	-.021	-.021	-.022	-.017	-.016	-.018	-.019	-.020	.396
.408							-.016			.408
.426	.068	.051	.053	.049	.052	.051	.049	.046	.049	.426
.451	.072	.049	.048	.048	.054	.049	.049	.048	.050	.451
.476	.073	.047	.045	.045	.045	.045	.045	.046	.051	.476
.501	.075		.043	.041	.041	.041	.042		.049	.501
.530	-.007	-.024	-.026	-.026	-.024		-.022	-.021	-.020	.530
.548							-.021			.548
.566							-.019			.566
.584	-.004	-.021	-.021	-.022	-.022	-.021	-.018	-.018	-.017	.584
.602							-.017			.602
.620							-.016			.620
.638	-.005	-.019		-.018	-.017		-.014		-.016	.638
.655							-.012			.655
.673							-.011			.673
.691	-.004	-.017	-.018		-.013	-.013		-.015	-.016	.691
.709							-.010			.709
.727							-.008			.727
.745	-.005	-.008		-.013	-.011		-.008		-.016	.745
.763							-.008			.763
.781							-.009			.781
.799							-.007			.799
.817	-.003	-.014	-.012	-.010	-.010	-.007	-.006	-.011	-.012	.817
.834							-.006			.834
.870							-.005			.870
.888							-.004			.888
.921	-.092									.921
.924	-.000	-.010		-.008			-.004			.924
.947							-.006			.947
.964							-.004			.964
.981	.007	-.008	-.008		-.006	-.004	-.006	-.006	-.009	.981
.984					-.007				-.013	.984
.998							-.011			.998
1.000	-.095									1.000

Nose rake			Base rake		
Orifice station, y, in.	Cp top	Cp side	Orifice station, y, in.	Cp top	Cp side
.010	.763	.864	.031	.343	.121
.030	1.256	1.176	.094	.691	.451
.050	1.396	1.206	.156	.872	.595
.070	1.415	1.222	.219	1.082	.719
.090	1.425	1.230	.281	1.231	.847
.110	1.431	1.213	.344	1.318	.986
.130	1.433	1.128	.406	1.378	1.095
.150	1.435	1.120	.469	1.421	1.166
.170	1.422	1.141	.750	1.545	
.190	1.362	1.124	1.000	1.602	
			1.250	1.637	
			1.500	1.566	

[redacted]

TABLE 18. - PRESSURE COEFFICIENTS FOR AN INTERCONTINENTAL BALLISTIC MISSILE FOR NOSE IV WITH NATURAL TRANSITION AT M = 2.98 - Continued

(d) $\alpha = 0^{\circ}$

Model station, $\frac{x}{l}$	Cp for meridian angle, θ, deg –									Model station, $\frac{x}{l}$
	0	90	105	120	150	165	180	225	270	
.042							1.752			.042
.043							1.728			.043
.044							1.640			.044
.046							1.409			.046
.049							.867			.049
.053							.847			.053
.060	.022	.020	.019	.023	.024	.025	.024	.030		.060
.075	.068	.065	.068	.065	.070	.069	.069	.069		.075
.085	.094	.098	.102	.098	.097	.098	.096	.098	.102	.085
.096	.130									.096
.126		.092	.091	.092	.093	.093	.096	.093	.095	.126
.143							-.034			.143
.154	-.027	-.025	-.027	-.027	-.028		-.026	-.027	-.026	.154
.171							-.026			.171
.189							-.026			.189
.206	-.024	-.025	-.025	-.026	-.026	-.024	-.026	-.025	-.024	.206
.223							-.024			.223
.241							-.023			.241
.258	-.021	-.023	-.023	-.023	-.023	-.023	-.023	-.021	-.017	.258
.275							-.022			.275
.293							-.021			.293
.310	-.018	-.019	-.020	-.021	-.021	-.021	-.020	-.018	-.019	.310
.327							-.019			.327
.344							-.018			.344
.362	-.015	-.017	-.017	-.018	-.018	-.017	-.017	-.016	-.016	.362
.379							-.016			.379
.396	-.014	-.006	-.008	-.010	-.016	-.017	-.016	-.015	-.014	.396
.408							-.016			.408
.426	.054	.022	.031	.035	.058	.057	-.001	.056	.053	.426
.451	.058	.056	.057	.056	.061	.056	.056	.057	.056	.451
.476	.056	.058	.055	.055	.054	.055	.055	.057	.055	.476
.501	.055		.054	.053	.053	.052	.054		.054	.501
.530	-.016	-.018	-.019	-.019	-.020		-.017	-.017	-.015	.530
.548							-.016			.548
.566							-.014			.566
.584	-.012	-.016	-.015	-.015	-.017	-.016	-.014	-.013	-.012	.584
.602							-.013			.602
.620							-.012			.620
.638	-.011	-.012		-.010	-.013		-.011		-.010	.638
.655							-.011			.655
.673							-.011			.673
.691	-.010	-.011	-.011		-.013	-.013		-.011	-.011	.691
.709							-.011			.709
.727							-.010			.727
.745	-.008	-.002		-.009	-.010		-.009		-.010	.745
.763							-.009			.763
.781							-.010			.781
.799							-.008			.799
.817	-.006	-.006	-.007	-.007	-.009	-.007	-.006	-.008	-.007	.817
.834							-.007			.834
.870							-.008			.870
.888							-.006			.888
.921	-.084									.921
.924	-.003	-.005		-.008			-.004			.924
.947							-.005			.947
.964							-.002			.964
.981	.002	-.004	-.005		-.005	-.002	-.004	-.004	-.005	.981
.984					-.008				-.008	.984
.998							-.007			.998
1.000	-.087									1.000

Nose rake			Base rake		
Orifice station, y, in.	Cp top	Cp side	Orifice station, y, in.	Cp top	Cp side
.010	.624	.869	.031	.234	.223
.030	1.164	1.180	.094	.417	.389
.050	1.311	1.211	.156	.521	.515
.070	1.332	1.226	.219	.600	.626
.090	1.336	1.230	.281	.677	.730
.110	1.340	1.208	.344	.762	.850
.130	1.339	1.134	.406	.860	.954
.150	1.335	1.124	.469	.939	1.023
.170	1.314	1.141	.750	1.187	
.190	1.261	1.123	1.000	1.269	
			1.250	1.329	
			1.500	1.331	

[redacted]

TABLE 18. - PRESSURE COEFFICIENTS FOR AN INTERCONTINENTAL BALLISTIC MISSILE FOR NOSE IV WITH NATURAL TRANSITION AT $M = 2.98$ - Continued

(e) $\alpha = 3.0^{\circ}$

Model station, $\frac{x}{l}$	Cp for meridian angle, θ, deg –									Model station, $\frac{x}{l}$
	0	90	105	120	150	165	180	225	270	
.042							1.749			.042
.043							1.739			.043
.044							1.677			.044
.046							1.472			.046
.049							1.021			.049
.053							.915			.053
.060	.000	.020	.025	.036	.049	.052	.054	.050		.060
.075	.033	.065	.078	.085	.105	.108	.110	.096		.075
.085	.059	.097	.112	.118	.132	.139	.138	.127	.101	.085
.096	.091									.096
.126		.090	.100	.111	.126	.130	.135	.122	.093	.126
.143							-.013			.143
.154	-.043	-.028	-.022	-.018	-.010		-.006	-.013	-.025	.154
.171							-.006			.171
.189							-.007			.189
.206	-.035	-.028	-.023	-.018	-.010	-.007	-.007	-.013	-.025	.206
.223							-.007			.223
.241							-.008			.241
.258	-.030	-.026	-.023	-.018	-.010	-.008	-.008	-.013	-.019	.258
.275							-.008			.275
.293							-.009			.293
.310	-.024	-.024	-.023	-.020	-.012	-.010	-.009	-.013	-.023	.310
.327							-.009			.327
.344							-.009			.344
.362	-.018	-.024	-.020	-.017	-.012	-.010	-.010	-.013	-.021	.362
.379							-.010			.379
.396	-.015	-.024	-.021	-.017	-.012	-.010	-.008	-.013	-.020	.396
.408							-.009			.408
.426	.048	.045	.055	.054	.062	.065	.067	.061	.049	.426
.451	.051	.048	.051	.054	.070	.067	.071	.064	.050	.451
.476	.046	.046	.049	.053	.067	.069	.072	.065	.049	.476
.501	.043		.048	.051	.067	.071	.074		.048	.501
.530	-.021	-.025	-.023	-.019	-.010		-.006	-.010	-.021	.530
.548							-.005			.548
.566							-.004			.566
.584	-.017	-.022	-.020	-.017	-.012	-.008	-.005	-.009	-.018	.584
.602							-.005			.602
.620							-.005			.620
.638	-.014	-.019		-.015	-.010		-.004		-.017	.638
.655							-.004			.655
.673							-.004			.673
.691	-.012	-.019	-.017		-.010	-.008		-.010	-.017	.691
.709							-.004			.709
.727							-.004			.727
.745	-.009	-.009		-.014	-.008		-.004		-.016	.745
.763							-.004			.763
.781							-.007			.781
.799							-.008			.799
.817	-.006	-.013	-.014	-.013	-.009	-.006	-.004	-.010	-.014	.817
.834							-.004			.834
.870							-.001			.870
.888							.000			.888
.921	-.088									.921
.924	-.005	-.012		-.010			.000			.924
.947							-.000			.947
.964							.000			.964
.981	.001	-.009	-.011		-.002	-.001	-.000	-.004	-.010	.981
.984					-.005				-.015	.984
.998							-.002			.998
1.000	-.091									1.000

Nose rake			Base rake		
Orifice station, y, in.	Cp top	Cp side	Orifice station, y, in.	Cp top	Cp side
.010	.471	.870	.031	.191	.238
.030	1.063	1.178	.094	.328	.461
.050	1.233	1.205	.156	.416	.623
.070	1.242	1.224	.219	.476	.747
.090	1.247	1.226	.281	.525	.887
.110	1.253	1.204	.344	.566	1.029
.130	1.249	1.126	.406	.606	1.024
.150	1.243	1.129	.469	.643	1.191
.170	1.228	1.143	.750	.784	
.190	1.169	1.123	1.000	.940	
			1.250	1.022	
			1.500	.994	

[redacted]

TABLE 18. - PRESSURE COEFFICIENTS FOR AN INTERCONTINENTAL BALLISTIC MISSILE FOR NOSE IV WITH NATURAL TRANSITION AT M = 2.98 - Continued

(f) $\alpha = 6.3^{\circ}$

Model station, $\frac{x}{l}$	Cp for meridian angle, θ, deg –									Model station, $\frac{x}{l}$
	0	90	105	120	150	165	180	225	270	
.042							1.732			.042
.043							1.753			.043
.044							1.714			.044
.046							1.548			.046
.049							1.153			.049
.053							.986			.053
.060	-.029	.017	.030	.050	.079	.088	.091	.075		.060
.075	.000	.063	.088	.107	.148	.157	.161	.129		.075
.085	.023	.096	.121	.141	.178	.191	.191	.161	.093	.085
.096	.050									.096
.126		.087	.108	.129	.166	.175	.182	.156	.089	.126
.143							.014			.143
.154	-.060	-.031	-.021	-.006	.011		.022	.003	-.027	.154
.171							.021			.171
.189							.020			.189
.206	-.044	-.032	-.024	-.011	.009	.016	.019	.001	-.033	.206
.223							.018			.223
.241							.015			.241
.258	-.032	-.038	-.027	-.017	.006	.011	.013	-.003	-.030	.258
.275							.011			.275
.293							.011			.293
.310	-.023	-.040	-.032	-.020	.001	.007	.010	-.006	-.040	.310
.327							.010			.327
.344							.009			.344
.362	-.017	-.044	-.036	-.023	-.000	.006	.009	-.009	-.043	.362
.379							.008			.379
.396	-.015	-.047	-.038	-.027	-.001	.006	.010	-.011	-.044	.396
.408							.008			.408
.426	.045	.008	.026	.040	.077	.093	.097	.065	.013	.426
.451	.048	.013	.025	.045	.089	.097	.105	.071	.018	.451
.476	.040	.016	.026	.048	.091	.103	.110	.077	.021	.476
.501	.034		.030	.048	.093	.104	.113		.024	.501
.530	-.026	-.041	-.036	-.025	.001		.014	-.006	-.039	.530
.548							.014			.548
.566							.014			.566
.584	-.023	-.042	-.036	-.027	-.001	.005	.012	-.007	-.040	.584
.602							.012			.602
.620							.010			.620
.638	-.016	-.042		-.025	-.001		.012		-.040	.638
.655							.012			.655
.673							.011			.673
.691	-.014	-.043	-.037		-.005	.003		-.009	-.043	.691
.709							.007			.709
.727							.007			.727
.745	-.012	-.034		-.028	-.005		.009		-.042	.745
.763							.011			.763
.781							.010			.781
.799							.010			.799
.817	-.008	-.040	-.036	-.026	-.000	.009	.013	-.010	-.040	.817
.834							.012			.834
.870							.013			.870
.888							.012			.888
.921	-.103									.921
.924	-.008	-.035		-.028			.013			.924
.947							.012			.947
.964							.014			.964
.981	-.001	-.034	-.036		.001	.009	.013	-.010	-.033	.981
.984					-.002				-.038	.984
.998							.013			.998
1.000	-.104									1.000

Nose rake			Base rake		
Orifice station, y, in.	Cp top	Cp side	Orifice station, y, in.	Cp top	Cp side
.010	.259	.863	.031	.345	.243
.030	.924	1.179	.094	.720	.674
.050	1.135	1.207	.156	.787	.922
.070	1.142	1.224	.219	.845	1.139
.090	1.146	1.224	.281	.876	1.309
.110	1.148	1.196	.344	.891	1.372
.130	1.147	1.115	.406	.905	1.403
.150	1.143	1.130	.469	.908	1.425
.170	1.125	1.139	.750	.925	
.190	1.077	1.122	1.000	.938	
			1.250	.957	
			1.500	.917	

[redacted]

TABLE 18. - PRESSURE COEFFICIENTS FOR AN INTERCONTINENTAL BALLISTIC MISSILE FOR NOSE IV WITH NATURAL TRANSITION AT M = 2.98 - Concluded

(g) $\alpha = 10.1^{\circ}$

Model station, $\frac{x}{l}$	Cp for meridian angle, θ, deg – 0	90	105	120	150	165	180	225	270	Model station, $\frac{x}{l}$
.042							1.720			.042
.043							1.765			.043
.044							1.748			.044
.046							1.625			.046
.049							1.272			.049
.053							1.071			.053
.060	-.058	.014	.036	.068	.122	.138	.145	.106		.060
.075	-.018	.063	.102	.135	.209	.227	.231	.173		.075
.085	-.010	.098	.137	.174	.240	.263	.264	.209	.083	.085
.096	.000									.096
.126		.085	.119	.155	.222	.241	.254	.199	.082	.126
.143							.058			.143
.154	-.069	-.034	-.015	.006	.046		.066	.030	-.034	.154
.171							.064			.171
.189							.060			.189
.206	-.048	-.042	-.023	-.002	.040	.050	.057	.019	-.041	.206
.223							.056			.223
.241							.053			.241
.258	-.030	-.051	-.034	-.010	.034	.046	.051	.012	-.047	.258
.275							.048			.275
.293							.047			.293
.310	-.022	-.062	-.042	-.018	.027	.041	.047	.007	-.060	.310
.327							.046			.327
.344							.045			.344
.362	-.018	-.070	-.050	-.023	.023	.039	.045	.004	-.068	.362
.379							.043			.379
.396	-.016	-.074	-.054	-.027	.023	.038	.046	.001	-.072	.396
.408							.044			.408
.426	.045	-.035	.002	.038	.116	.144	.153	.087	-.033	.426
.451	.053	-.031	.004	.048	.135	.155	.168	.098	-.026	.451
.476	.042	-.028	.007	.050	.134	.160	.173	.106	-.022	.476
.501	.031		.009	.053	.134	.160	.174		-.020	.501
.530	-.033	-.072	-.052	-.026	.025		.048	.006	-.072	.530
.548							.049			.548
.566							.049			.566
.584	-.034	-.077	-.055	-.028	.022	.039	.047	.005	-.076	.584
.602							.048			.602
.620							.046			.620
.638	-.025	-.078		-.028	.021		.047		-.078	.638
.655							.047			.655
.673							.046			.673
.691	-.024	-.081	-.059		.016	.035		.001	-.082	.691
.709							.045			.709
.727							.047			.727
.745	-.025	-.071		-.033	.021		.046		-.083	.745
.763							.046			.763
.781							.041			.781
.799							.041			.799
.817	-.026	-.073	-.061	-.034	.020	.038	.046	-.003	-.074	.817
.834							.043			.834
.870							.044			.870
.888							.043			.888
.921	-.112									.921
.924	-.026	-.052		-.039			.044			.924
.947							.038			.947
.964							.039			.964
.981	-.018	-.046	-.067		.015	.033	.040	-.009	-.041	.981
.984					.017				-.050	.984
.998							.042			.998
1.000	-.114									1.000

Nose rake			Base rake		
Orifice station, y, in.	Cp top	Cp side	Orifice station, y, in.	Cp top	Cp side
.010	.023	.872	.031	.457	.108
.030	.239	1.192	.094	.301	.415
.050	.807	1.212	.156	.902	.963
.070	.937	1.223	.219	.883	1.173
.090	.994	1.224	.281	.888	1.331
.110	.995	1.201	.344	.883	1.358
.130	.988	1.119	.406	.879	1.365
.150	.990	1.126	.469	.882	1.372
.170	.983	1.142	.750	.865	
.190	.943	1.136	1.000	.874	
			1.250	.907	
			1.500	.890	

[redacted]

TABLE 19. - PRESSURE COEFFICIENTS FOR AN INTERCONTINENTAL BALLISTIC MISSILE FOR NOSE IV WITH NATURAL TRANSITION AT M = 3.96

(a) $\alpha = -10.1^{\circ}$

Model station, $\frac{x}{l}$	Cp for meridian angle, θ, deg –									Model station, $\frac{x}{l}$
	0	90	105	120	150	165	180	225	270	
.042							1.751			.042
.043							1.653			.043
.044							1.514			.044
.046							1.241			.046
.049							.443			.049
.053							.470			.053
.060	.188	.069	.050	.037	.012	.004	.001	.025		.060
.075	.233	.096	.076	.055	.026	.017	.013	.036		.075
.085	.251	.115	.098	.067	.037	.029	.026	.048	.100	.085
.096	.290									.096
.126		.088	.067	.048	.029	.027	.026	.034	.084	.126
.143							-.028			.143
.154	.070	-.005	-.017	-.023	-.029		-.028	-.029	-.005	.154
.171							-.027			.171
.189							-.026			.189
.206	.056	-.013	-.023	-.028	-.026	-.026	-.025	-.028	-.013	.206
.223							-.024			.223
.241							-.022			.241
.258	.048	-.021	-.028	-.032	-.026	-.024	-.020	-.031	-.011	.258
.275							-.018			.275
.293							-.015			.293
.310	.045	-.028	-.033	-.032	-.030	-.019	-.011	-.033	-.032	.310
.327							-.009			.327
.344							-.010			.344
.362	.042	-.031	-.036	-.033	-.033	-.014	-.010	-.034	-.034	.362
.379							-.009			.379
.396	.041	-.033	-.036	-.033	-.031	-.014	-.009	-.034	-.037	.396
.408							-.009			.408
.426	.122	-.015	-.007	-.023	-.014	.023	.023	-.015	-.017	.426
.451	.143	-.009	-.023	-.013	.005	.023	.028	-.011	-.009	.451
.476	.153	-.004	-.021	-.012	-.010	.015	.023	-.005	-.006	.476
.501	.160		-.019	-.010	-.010	.011	.016		-.004	.501
.530	.055	-.033	-.037	-.032	-.030		-.022	-.023	-.034	.530
.548							-.024			.548
.566							-.023			.566
.584	.047	-.036	-.037	-.035	-.027	-.023	-.024	-.027	-.037	.584
.602							-.023			.602
.620							-.021			.620
.638	.045	-.036		-.032	-.024		-.020		-.039	.638
.655							-.019			.655
.673							-.019			.673
.691	.045	-.040	-.035		-.028	-.024		-.034	-.040	.691
.709							-.019			.709
.727							-.019			.727
.745	.045	-.020		-.032	-.031		-.020		-.039	.745
.763							-.021			.763
.781							-.020			.781
.799							-.020			.799
.817	.044	-.038	-.032	-.030	-.032	-.025	-.020	-.030	-.039	.817
.834							-.020			.834
.870							-.019			.870
.888							-.020			.888
.921	-.058									.921
.924	.043	-.036		-.027			-.020			.924
.947							-.022			.947
.964							-.019			.964
.981	.052	-.031	-.028		-.030	-.031	-.020	-.030	-.037	.981
.984					-.032				-.038	.984
.998							-.022			.998
1.000	-.060									1.000

Nose rake			Base rake		
Orifice station, y, in.	Cp top	Cp side	Orifice station, y, in.	Cp top	Cp side
.010	.872	.808	.031	.640	.030
.030	1.377	1.206	.094	1.583	.318
.050	1.528	1.212	.156	1.986	.647
.070	1.559	1.219	.219	2.158	.828
.090	1.577	1.206	.281	2.178	.948
.110	1.603	1.143	.344	2.167	1.027
.130	1.615	1.107	.406	2.148	1.061
.150	1.630	1.127	.469	2.158	1.094
.170	1.628	1.150	.750	2.148	
.190	1.575	1.134	1.000	2.164	
			1.250	2.175	
			1.500	2.046	

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TABLE 19. - PRESSURE COEFFICIENTS FOR AN INTERCONTINENTAL BALLISTIC MISSILE FOR NOSE IV WITH NATURAL TRANSITION AT M = 3.96 - Continued

(b) $\alpha = -6.3^{\circ}$

Model station, $\frac{x}{l}$	Cp for meridian angle, θ, deg –									Model station, $\frac{x}{l}$
	0	90	105	120	150	165	180	225	270	
.042							1.775			.042
.043							1.705			.043
.044							1.573			.044
.046							1.327			.046
.049							.545			.049
.053							.594			.053
.060	.140	.072	.059	.049	.032	.026	.023	.042		.060
.075	.175	.097	.085	.065	.048	.040	.038	.056		.075
.085	.191	.116	.108	.085	.062	.056	.054	.072	.109	.085
.096	.225									.096
.126		.090	.076	.061	.048	.046	.045	.052	.090	.126
.143							-.027			.143
.154	.036	-.003	-.010	-.017	-.025		-.026	-.021	.000	.154
.171							-.024			.171
.189							-.023			.189
.206	.031	-.010	-.017	-.019	-.023	-.020	-.022	-.020	-.009	.206
.223							-.020			.223
.241							-.018			.241
.258	.022	-.015	-.022	-.022	-.019	-.019	-.016	-.020	-.002	.258
.275							-.014			.275
.293							-.014			.293
.310	.017	-.022	-.025	-.022	-.021	-.018	-.012	-.020	-.019	.310
.327							-.011			.327
.344							-.010			.344
.362	.015	-.024	-.028	-.026	-.022	-.015	-.010	-.019	-.024	.362
.379							-.009			.379
.396	.012	-.026	-.030	-.028	-.019	-.012	-.009	-.020	-.025	.396
.408							-.009			.408
.426	.073	.003	.015	-.003	.016	.024	.024	.011	.004	.426
.451	.081	.009	.004	.004	.032	.027	.030	.019	.009	.451
.476	.089	.010	.003	.006	.018	.023	.024	.019	.009	.476
.501	.093		.003	.006	.015	.018	.021		.011	.501
.530	.026	-.025	-.030	-.026	-.018		-.015	-.019	-.025	.530
.548							-.017			.548
.566							-.016			.566
.584	.018	-.029	-.030	-.028	-.022	-.019	-.016	-.018	-.027	.584
.602							-.014			.602
.620							-.013			.620
.638	.016	-.032		-.025	-.017		-.012		-.029	.638
.655							-.011			.655
.673							-.010			.673
.691	.015	-.033	-.032		-.016	-.015		-.018	-.032	.691
.709							-.009			.709
.727							-.009			.727
.745	.015	-.014		-.025	-.016		-.008		-.032	.745
.763							-.008			.763
.781							-.009			.781
.799							-.009			.799
.817	.015	-.036	-.027	-.022	-.016	-.014	-.008	-.015	-.032	.817
.834							-.009			.834
.870							-.008			.870
.888							-.008			.888
.921	-.061									.921
.924	.015	-.033		-.018			-.008			.924
.947							-.009			.947
.964							-.009			.964
.981	.019	-.029	-.021		-.019	-.013	-.009	-.013	-.028	.981
.984					-.018				-.031	.984
.998							-.010			.998
1.000	-.061									1.000

Nose rake			Base rake		
Orifice station, y, in.	Cp top	Cp side	Orifice station, y, in.	Cp top	Cp side
.010	.719	.831	.031	.410	.093
.030	1.271	1.202	.094	.970	.368
.050	1.430	1.220	.156	1.283	.599
.070	1.451	1.231	.219	1.576	.753
.090	1.459	1.218	.281	1.679	.922
.110	1.473	1.153	.344	1.723	1.043
.130	1.479	1.117	.406	1.759	1.111
.150	1.486	1.137	.469	1.783	1.157
.170	1.470	1.159	.750	1.830	
.190	1.415	1.142	1.000	1.853	
			1.250	1.862	
			1.500	1.757	

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TABLE 19. - PRESSURE COEFFICIENTS FOR AN INTERCONTINENTAL BALLISTIC MISSILE FOR NOSE IV WITH NATURAL TRANSITION AT M = 3.96 - Continued

(c) $\alpha = -3.0^{\circ}$

Model station, $\frac{x}{l}$	Cp for meridian angle, θ, deg –									Model station, $\frac{x}{l}$
	0	90	105	120	150	165	180	225	270	
.042							1.788			.042
.043							1.741			.043
.044							1.636			.044
.046							1.389			.046
.049							.667			.049
.053							.721			.053
.060	.102	.072	.065	.062	.054	.052	.049	.060		.060
.075	.133	.097	.092	.081	.073	.068	.067	.075		.075
.085	.146	.116	.116	.101	.089	.086	.085	.095	.110	.085
.096	.176									.096
.126		.090	.083	.076	.066	.064	.064	.069	.090	.126
.143							-.018			.143
.154	.016	-.001	-.005	-.008	-.014		-.016	-.011	.000	.154
.171							-.016			.171
.189							-.015			.189
.206	.011	-.006	-.010	-.012	-.013	-.014	-.014	-.012	-.005	.206
.223							-.014			.223
.241							-.013			.241
.258	.006	-.009	-.012	-.013	-.013	-.014	-.013	-.013	.002	.258
.275							-.012			.275
.293							-.012			.293
.310	.001	-.012	-.014	-.014	-.013	-.013	-.012	-.012	-.009	.310
.327							-.012			.327
.344							-.010			.344
.362	.001	-.014	-.016	-.014	-.012	-.011	-.009	-.011	-.011	.362
.379							-.007			.379
.396	.000	-.009	-.010	-.010	-.008	-.005	-.007	-.012	-.012	.396
.408							-.004			.408
.426	.045	.012	.018	.002	.004	.012	.018	.024	.015	.426
.451	.052	.026	.021	.019	.034	.024	.025	.029	.029	.451
.476	.054	.028	.025	.023	.026	.025	.027	.027	.030	.476
.501	.057		.025	.023	.023	.023	.024		.032	.501
.530	.006	-.014	-.019	-.019	-.014		-.013	-.011	-.013	.530
.548							-.013			.548
.566							-.012			.566
.584	.002	-.016	-.018	-.017	-.014	-.014	-.012	-.013	-.012	.584
.602							-.010			.602
.620							-.010			.620
.638	.001	-.016		-.014	-.013		-.009		-.011	.638
.655							-.008			.655
.673							-.008			.673
.691	.000	-.017	-.018		-.011	-.010		-.009	-.012	.691
.709							-.008			.709
.727							-.007			.727
.745	.000	.0		-.013	-.010		-.006		-.012	.745
.763							-.005			.763
.781							-.006			.781
.799							-.006			.799
.817	.000	-.017	-.014	-.011	-.008	-.008	-.005	-.007	-.011	.817
.834							-.006			.834
.870							-.005			.870
.888							-.005			.888
.921	-.059									.921
.924	.000	-.014		-.010			-.005			.924
.947							-.006			.947
.964							-.005			.964
.981	.005	-.012	-.010		-.008	-.007	-.004	-.005	-.009	.981
.984					-.008				-.011	.984
.998							-.008			.998
1.000	-.059									1.000

Nose rake			Base rake		
Orifice station, y, in.	Cp top	Cp side	Orifice station, y, in.	Cp top	Cp side
.010	.540	.822	.031	.232	.133
.030	1.168	1.202	.094	.489	.274
.050	1.338	1.217	.156	.654	.383
.070	1.345	1.231	.219	.824	.477
.090	1.351	1.220	.281	.967	.569
.110	1.360	1.166	.344	1.059	.668
.130	1.352	1.123	.406	1.130	.781
.150	1.342	1.137	.469	1.200	.869
.170	1.322	1.148	.750	1.410	
.190	1.273	1.139	1.000	1.513	
			1.250	1.577	
			1.500	1.524	

[redacted]

TABLE 19. - PRESSURE COEFFICIENTS FOR AN INTERCONTINENTAL BALLISTIC MISSILE FOR NOSE IV WITH NATURAL TRANSITION AT M = 3.96 - Continued

(d) $\alpha = 0^{\circ}$

Model station, $\frac{x}{l}$	Cp for meridian angle, θ, deg –									Model station, $\frac{x}{l}$
	0	90	105	120	150	165	180	225	270	
.042							1.779			.042
.043							1.750			.043
.044							1.669			.044
.046							1.439			.046
.049							.814			.049
.053							.829			.053
.060	.077	.074	.072	.075	.076	.077	.076	.081		.066
.075	.102	.098	.102	.098	.102	.100	.101	.099		.075
.085	.115	.117	.125	.117	.115	.115	.114	.116	.110	.085
.096	.139									.096
.126		.090	.091	.091	.091	.091	.092	.091	.092	.126
.143							-.003			.143
.154	.001	-.001	-.002	-.001	-.003		-.001	-.002	-.000	.154
.171							-.003			.171
.189							-.004			.189
.206	-.002	-.005	-.006	-.005	-.005	-.006	-.005	-.005	-.005	.206
.223							-.006			.223
.241							-.007			.241
.258	-.005	-.007	-.007	-.006	-.007	-.007	-.007	-.007	.002	.258
.275							-.007			.275
.293							-.008			.293
.310	-.006	-.008	-.008	-.007	-.008	-.008	-.008	-.007	-.007	.310
.327							-.007			.327
.344							-.007			.344
.362	-.007	-.008	-.009	-.008	-.008	-.008	-.008	-.008	-.008	.362
.379							-.008			.379
.396	-.007	-.0	.000	-.000	-.003	-.005	-.008	-.008	-.009	.396
.408							-.004			.408
.426	.032	.004	.018	.005	.013	.022	.035	.024	.028	.426
.451	.038	.024	.024	.026	.046	.034	.033	.035	.034	.451
.476	.035	.029	.029	.029	.033	.034	.033	.036	.035	.476
.501	.038		.029	.032	.032	.034	.034		.037	.501
.530	-.004	-.012	-.012	-.010	-.011		-.010	-.007	-.006	.530
.548							-.010			.548
.566							-.009			.566
.584	-.007	-.009	-.010	-.009	-.009	-.009	-.008	-.008	-.008	.584
.602							-.007			.602
.620							-.008			.620
.638	-.007	-.008		-.006	-.008		-.007		-.005	.638
.655							-.006			.655
.673							-.006			.673
.691	-.007	-.009	-.009		-.007	-.006		-.006	-.004	.691
.709							-.006			.709
.727							-.006			.727
.745	-.007	.005		-.008	-.007		-.006		-.004	.745
.763							-.006			.763
.781							-.006			.781
.799							-.006			.799
.817	-.006	-.008	-.007	-.008	-.005	-.006	-.006	-.005	-.003	.817
.834							-.006			.834
.870							-.005			.870
.888							-.005			.888
.921	-.057									.921
.924	-.004	-.007		-.008			-.005			.924
.947							-.006			.947
.964							-.005			.964
.981	-.000	-.005	-.006		-.005	-.005	-.005	-.004	-.001	.981
.984					-.005				-.004	.984
.998							-.008			.998
1.000	-.057									1.000

Nose rake			Base rake		
Orifice station, y, in.	Cp top	Cp side	Orifice station, y, in.	Cp top	Cp side
.010	.397	.816	.031	.131	.131
.030	1.051	1.188	.094	.247	.247
.050	1.243	1.210	.156	.315	.326
.070	1.246	1.224	.219	.384	.409
.090	1.246	1.210	.281	.436	.478
.110	1.250	1.163	.344	.503	.545
.130	1.239	1.110	.406	.579	.632
.150	1.226	1.134	.469	.642	.706
.170	1.188	1.148	.750	.870	
.190	1.147	1.129	1.000	1.016	
			1.250	1.078	
			1.500	1.103	

[redacted]

TABLE 19. - PRESSURE COEFFICIENTS FOR AN INTERCONTINENTAL BALLISTIC MISSILE FOR NOSE IV WITH NATURAL TRANSITION AT M = 3.96 - Continued

(e) $\alpha = 3.0^{\circ}$

Model station, $\frac{x}{l}$	Cp for meridian angle, θ, deg –									Model station, $\frac{x}{l}$
	0	90	105	120	150	165	180	225	270	
.042							1.776			.042
.043							1.768			.043
.044							1.711			.044
.046							1.503			.046
.049							.992			.049
.053							.915			.053
.060	.050	.072	.077	.087	.099	.102	.103	.100		.060
.075	.069	.097	.109	.112	.130	.130	.132	.120		.075
.085	.085	.116	.131	.130	.141	.147	.145	.136	.108	.085
.096	.109									.096
.126		.089	.097	.106	.117	.121	.123	.115	.090	.126
.143							.011			.143
.154	-.012	-.003	-.000	.003	.008		.013	.005	-.000	.154
.171							.010			.171
.189							.009			.189
.206	-.010	-.006	-.005	-.001	.002	.003	.007	.001	-.006	.206
.223							.005			.223
.241							.004			.241
.258	-.014	-.009	-.006	-.004	.000	.001	.003	-.001	.002	.258
.275							.002			.275
.293							.002			.293
.310	-.014	-.011	-.009	-.006	-.003	-.001	.000	-.004	-.010	.310
.327							-.001			.327
.344							-.002			.344
.362	-.010	-.012	-.011	-.009	-.006	-.003	-.003	-.006	-.012	.362
.379							-.003			.379
.396	-.008	-.006	-.006	-.005	-.003	-.003	-.003	-.004	-.010	.396
.408							.003			.408
.426	.027	.004	.021	.014	.026	.031	.037	.022	.009	.426
.451	.029	.023	.027	.034	.056	.047	.049	.041	.026	.451
.476	.025	.027	.030	.036	.047	.050	.050	.043	.030	.476
.501	.024		.031	.036	.046	.051	.052		.031	.501
.530	-.010	-.014	-.011	-.008	-.002		.000	-.004	-.012	.530
.548							.000			.548
.566							.001			.566
.584	-.012	-.013	-.011	-.009	-.004	-.004	-.001	-.003	-.012	.584
.602							-.000			.602
.620							-.001			.620
.638	-.010	-.012		-.008	-.005		-.001		-.010	.638
.655							-.000			.655
.673							-.001			.673
.691	-.009	-.014	-.014		-.005	-.005		-.005	-.011	.691
.709							-.001			.709
.727							-.001			.727
.745	-.007	.0		-.011	-.005		-.001		-.011	.745
.763							-.001			.763
.781							-.002			.781
.799							-.002			.799
.817	-.006	-.014	-.014	-.011	-.005	-.004	-.001	-.006	-.010	.817
.834							-.001			.834
.870							-.001			.870
.888							-.000			.888
.921	-.058									.921
.924	-.005	-.012		-.010			-.000			.924
.947							-.005			.947
.964							-.001			.964
.981	-.001	-.010	-.012		-.005	-.001	-.001	-.003	-.008	.981
.984					-.005				-.010	.984
.998							-.002			.998
1.000	-.059									1.000

Nose rake			Base rake		
Orifice station, y, in.	Cp top	Cp side	Orifice station, y, in.	Cp top	Cp side
.010	.261	.815	.031	.088	.142
.030	.954	1.195	.094	.151	.308
.050	1.180	1.209	.156	.200	.448
.070	1.162	1.226	.219	.249	.556
.090	1.161	1.211	.281	.283	.683
.110	1.161	1.150	.344	.310	.786
.130	1.153	1.112	.406	.348	.875
.150	1.139	1.133	.469	.377	.929
.170	1.119	1.146	.750	.507	
.190	1.066	1.128	1.000	.647	
			1.250	.748	
			1.500	.730	

[redacted]

TABLE 19. - PRESSURE COEFFICIENTS FOR AN INTERCONTINENTAL BALLISTIC MISSILE FOR NOSE IV WITH NATURAL TRANSITION AT M = 3.96 - Continued

(f) $\alpha = 6.3^{\circ}$

Model station, $\frac{x}{l}$	Cp for meridian angle, θ, deg –									Model station, $\frac{x}{l}$
	0	90	105	120	150	165	180	225	270	
.042							1.769			.042
.043							1.784			.043
.044							1.746			.044
.046							1.559			.046
.049							1.139			.049
.053							.998			.053
.060	.025	.071	.085	.103	.131	.138	.140	.124		.060
.075	.040	.097	.118	.130	.166	.174	.176	.149		.075
.085	.054	.116	.140	.150	.180	.190	.191	.166	.109	.085
.096	.077									.096
.126		.089	.106	.123	.150	.159	.163	.143	.090	.126
.143							.034			.143
.154	-.022	-.003	.003	.013	.027		.036	.020	-.000	.154
.171							.032			.171
.189							.029			.189
.206	-.018	-.009	-.002	.006	.021	.025	.028	.014	-.009	.206
.223							.025			.223
.241							.023			.241
.258	-.015		-.008	.000	.014	.018	.020	.007	-.003	.258
.275							.018			.275
.293							.016			.293
.310	-.014	-.019	-.013	-.006	.008	.013	.015	.002	-.019	.310
.327							.014			.327
.344							.014			.344
.362	-.011	-.021	-.016	-.008	.005	.011	.013	-.000	-.023	.362
.379							.013			.379
.396	-.009	3.727	-.018	-.010	.005	.010	.012	-.001	-.025	.396
.408							.015			.408
.426	.021	-.0	.025	.025	.054	.063	.069	.041	-.001	.426
.451	.027	.008	.021	.035	.077	.075	.081	.053	.009	.451
.476	.023	.012	.023	.038	.074	.083		.058	.012	.476
.501	.021		.025	.042	.076	.089	.095		.013	.501
.530	-.013	-.023	-.016	-.006	.014		.023	.005	-.023	.530
.548							.020			.548
.566							.018			.566
.584	-.017	-.026	-.019	-.010	.007	.013	.016	.000	-.024	.584
.602							.016			.602
.620							.016			.620
.638	-.012	-.027		-.010	.005		.016		-.026	.638
.655							.015			.655
.673							.015			.673
.691	-.011	-.030	-.023		.002	.009		-.002	-.028	.691
.709							.014			.709
.727							.014			.727
.745	-.009	-.011		-.014	.002		.015		-.028	.745
.763							.015			.763
.781							.014			.781
.799							.014			.799
.817	-.008	-.031	-.024	-.016	.004	.012	.015	-.002	-.029	.817
.834							.015			.834
.870							.015			.870
.888							.015			.888
.921	-.059									.921
.924	-.009	-.031		-.017			.016			.924
.947							.014			.947
.964							.014			.964
.981	-.005	-.026	-.027		.003	.013	.014	-.002	-.029	.981
.984					.003				-.029	.984
.998							.014			.998
1.000	-.061									1.000

Nose rake			Base rake		
Orifice station, y, in.	Cp top	Cp side	Orifice station, y, in.	Cp top	Cp side
.010	.120	.813	.031	.164	.075
.030	.741	1.192	.094	.328	.376
.050	1.092	1.212	.156	.408	.631
.070	1.067	1.223	.219	.450	.779
.090	1.058	1.206	.281	.481	.929
.110	1.058	1.143	.344	.499	1.023
.130	1.052	1.123	.406	.520	1.072
.150	1.047	1.138	.469	.529	1.123
.170	1.027	1.150	.750	.589	
.190	.980	1.130	1.000	.627	
			1.250	.665	
			1.500	.653	

[redacted]

TABLE 19. - PRESSURE COEFFICIENTS FOR AN INTERCONTINENTAL BALLISTIC MISSILE FOR NOSE IV WITH NATURAL TRANSITION AT M = 3.96 - Concluded

(g) $\alpha = 10.1^{\circ}$

Model station, $\frac{x}{l}$	Cp for meridian angle, θ, deg –									Model station, $\frac{x}{l}$
	0	90	105	120	150	165	180	225	270	
.042							1.738			.042
.043							1.794			.043
.044							1.778			.044
.046							1.646			.046
.049							1.280			.049
.053							1.083			.053
.060	-.001	.069	.091	.122	.172	.187	.194	.156		.060
.075	.012	.096	.128	.153	.217	.232	.237	.186		.075
.085	.028	.115	.150	.176	.234	.252	.253	.205	.103	.085
.096	.043									.096
.126		.087	.115	.145	.200	.217	.224	.180	.087	.126
.143							.069			.143
.154	-.029	-.004	.007	.026	.057		.075	.045	-.004	.154
.171							.069			.171
.189							.064			.189
.206	-.024	-.013	-.001	.015	.047	.055	.060	.032	-.011	.206
.223							.056			.223
.241							.054			.241
.258	-.017	-.022	-.010	.005	.037	.048	.052	.022	-.011	.258
.275							.051			.275
.293							.049			.293
.310	-.010	-.029	-.017	-.001	.031	.043	.048	.017	-.030	.310
.327							.047			.327
.344							.046			.344
.362	-.010	-.034	-.022	-.004	.029	.041	.044	.015	-.037	.362
.379							.045			.379
.396	-.009	-.036	-.024	-.007	.028	.041	.044	.013	-.039	.396
.408							.047			.408
.426	.021	-.015	.019	.035	.095	.118	.126	.072	-.016	.426
.451	.026	-.010	.015	.047	.124	.141	.151	.088	-.010	.451
.476	.022	-.007	.019	.053	.127	.150	.161	.097	-.005	.476
.501	.017		.024	.057	.131	.153	.165		-.003	.501
.530	-.018	-.034	-.021	.000	.040		.058	.022	-.035	.530
.548							.054			.548
.566							.055			.566
.584	-.025	-.039	-.024	-.005	.034	.045	.052	.017	-.039	.584
.602							.051			.602
.620							.049			.620
.638	-.020	-.039		-.007	.030		.051		-.040	.638
.655							.050			.655
.673							.050			.673
.691	-.019	-.042	-.028		.027	.042		.014	-.043	.691
.709							.049			.709
.727							.049			.727
.745	-.019	-.020		-.010	.028		.050		-.043	.745
.763							.048			.763
.781							.047			.781
.799							.047			.799
.817	-.019	-.042	-.030	-.013	.028	.043	.051	.013	-.042	.817
.834							.049			.834
.870							.048			.870
.888							.047			.888
.921	-.063									.921
.924	-.021	-.039		-.015			.047			.924
.947							.043			.947
.964							.044			.964
.981	-.019	-.034	-.033		.024	.040	.044	.010	-.040	.981
.984					.026				-.041	.984
.998							.044			.998
1.000	-.062									1.000

Nose rake			Base rake		
Orifice station, y, in.	Cp top	Cp side	Orifice station, y, in.	Cp top	Cp side
.010	.050	.815	.031	.280	.037
.030	.269	1.197	.094	.672	.350
.050	.841	1.217	.156	.598	.656
.070	.964	1.217	.219	.580	.788
.090	.938	1.199	.281	.584	.920
.110	.933	1.121	.344	.575	1.016
.130	.933	1.114	.406	.566	1.065
.150	.926	1.132	.469	.560	1.109
.170	.908	1.148	.750	.538	
.190	.882	1.134	1.000	.546	
			1.250	.580	
			1.500	.593	

[redacted]

[redacted]

TABLE 20. - PRESSURE COEFFICIENTS FOR AN INTERCONTINENTAL BALLISTIC MISSILE FOR NOSE IV WITH NATURAL TRANSITION AT M = 4.65

(a) $\alpha = -6.3^{\circ}$

Model station, $\frac{x}{l}$	Cp for meridian angle, θ, deg –									Model station, $\frac{x}{l}$
	0	90	105	120	150	165	180	225	270	
.042							1.828			.042
.043							1.727			.043
.044							1.598			.044
.046							1.381			.046
.049							.572			.049
.053							.600			.053
.060	.159	.099	.085	.076	.059	.052	.050	.063		.060
.075	.181	.116	.105	.094	.071	.061	.058	.071		.075
.085	.191	.130	.129	.104	.081	.075	.070	.084	.111	.085
.096	.223									.096
.126		.098	.085	.074	.059	.056	.057	.059	.088	.126
.143							-.000			.143
.154	.041	.013	.009	.005	-.000		-.001	-.003	.009	.154
.171							-.001			.171
.189							-.001			.189
.206	.032	.006	.002	-.000	-.000	-.003	.001	-.003	.000	.206
.223							.000			.223
.241							.000			.241
.258	.023	.001	-.000	-.004	-.001	-.002	.000	-.005	.016	.258
.275							.001			.275
.293							.001			.293
.310	.020	-.003	-.008	-.002	-.002	-.002	-.000	-.006	-.008	.310
.327							-.000			.327
.344							-.000			.344
.362	.016	-.006	-.007	-.004	-.001	-.002	-.000	-.007	-.010	.362
.379							-.000			.379
.396	.016	-.003	-.002	-.001	-.000	-.001	.000	-.005	-.011	.396
.408							.001			.408
.426	.068	.014	.030	.002	.002	.007	.021	.002	.010	.426
.451	.067	.022	.012	.007	.035	.012	.024	.012	.013	.451
.476	.072	.021	.015	.011	.014	.020	.021	.017	.015	.476
.501	.077		.015	.013	.016	.019	.017		.013	.501
.530	.026	-.005	-.007	-.007	.001		-.005	-.007	-.009	.530
.548							-.009			.548
.566							-.007			.566
.584	.019	-.007	-.008	-.007	-.003	-.006	-.007	-.008	-.011	.584
.602							-.006			.602
.620							-.006			.620
.638	.017	-.009		-.001	-.005		-.006		-.013	.638
.655							-.004			.655
.673							-.005			.673
.691	.016	-.011	-.009		-.005	-.002		-.007	-.014	.691
.709							-.005			.709
.727							-.003			.727
.745	.016	.018		-.006	-.004		-.003		-.014	.745
.763							-.003			.763
.781							-.004			.781
.799							-.003			.799
.817	.016	-.012	-.009	-.007	-.002	-.001	-.003	-.006	-.013	.817
.834							-.004			.834
.870							-.002			.870
.888							-.002			.888
.921	-.032									.921
.924	.016	-.011		-.007			-.003			.924
.947							-.005			.947
.964							-.001			.964
.981	.020	-.009	-.009		-.004	-.009	-.003	-.008	-.012	.981
.984					-.004				-.013	.984
.998							-.006			.998
1.000	-.032									1.000

Nose rake			Base rake		
Orifice station, y, in.	Cp top	Cp side	Orifice station, y, in.	Cp top	Cp side
.010	.588	.759	.031	.358	.060
.030	1.229	1.220	.094	.793	.265
.050	1.439	1.243	.156	1.123	.454
.070	1.450	1.236	.219	1.455	.554
.090	1.452	1.192	.281	1.611	.692
.110	1.443	1.127	.344	1.692	.814
.130	1.445	1.130	.406	1.750	.899
.150	1.445	1.146	.469	1.800	.971
.170	1.445	1.146	.750	1.865	
.190	1.392	1.153	1.000	1.904	
			1.250	1.923	
			1.500	1.777	

[redacted]

[redacted]

TABLE 20. - PRESSURE COEFFICIENTS FOR AN INTERCONTINENTAL BALLISTIC MISSILE FOR NOSE IV WITH NATURAL TRANSITION AT M = 4.65 - Continued

(b) $\alpha = -3.0^{\circ}$

Model station, $\frac{x}{l}$	Cp for meridian angle, θ, deg –									Model station, $\frac{x}{l}$
	0	90	105	120	150	165	180	225	270	
.042							1.836			.042
.043							1.766			.043
.044							1.667			.044
.046							1.430			.046
.049							.685			.049
.053							.724			.053
.060	.122	.098	.090	.086	.078	.073	.070	.078		.060
.075	.143	.117	.114	.101	.091	.086	.083	.089		.075
.085	.150	.130	.136	.117	.103	.101	.098	.103	.109	.085
.096	.176									.096
.126		.096	.091	.084	.074	.071	.069	.071	.089	.126
.143							-.002			.143
.154	.024	.012	.007	.005	.001		-.000	.000	.010	.154
.171							-.000			.171
.189							-.000			.189
.206	.016	.004	.001	.001	-.000	-.002	-.000	-.000	.003	.206
.223							-.000			.223
.241							-.002			.241
.258	.013	.001	-.000	-.003	-.002	-.004	-.003	-.003	.019	.258
.275							-.003			.275
.293							-.003			.293
.310	.008	-.003	-.005	-.003	-.005	-.003	-.003	-.003	-.001	.310
.327							-.002			.327
.344							-.000			.344
.362	.005	-.005	-.005	-.003	-.002	-.000	.000	-.002	-.004	.362
.379							.001			.379
.396	.005	-.0	-.000	.001	.001	.000	.001	-.001	-.002	.396
.408							.002			.408
.426	.040	.010	.031	.004	.003	.003	.008	.021	.010	.426
.451	.044	.022	.018	.012	.039	.008	.015	.020	.022	.451
.476	.046	.024	.021	.018	.014	.014	.018	.019	.023	.476
.501	.049		.022	.018	.016	.016	.019		.024	.501
.530	.010	-.007	-.008	-.009	-.007		-.006	-.006	-.007	.530
.548							-.006			.548
.566							-.008			.566
.584	.007	-.009	-.008	-.009	-.007	-.009	-.008	-.007	-.009	.584
.602							-.006			.602
.620							-.006			.620
.638	.005	-.007		-.003	-.007		-.005		-.008	.638
.655							-.003			.655
.673							-.005			.673
.691	.004	-.008	-.008		-.007	-.006		-.005	-.009	.691
.709							-.004			.709
.727							-.004			.727
.745	.004	.018		-.009	-.006		-.003		-.009	.745
.763							-.003			.763
.781							-.003			.781
.799							-.003			.799
.817	.005	-.010	-.008	-.009	-.004	-.005	-.002	-.004	-.008	.817
.834							-.003			.834
.870							-.003			.870
.888							-.002			.888
.921	-.035									.921
.924	.006	-.010		-.009			-.003			.924
.947							-.004			.947
.964							-.001			.964
.981	.006	-.006	-.008		-.005	-.007	-.003	-.003	-.007	.981
.984					-.006				-.008	.984
.998							-.006			.998
1.000	-.033									1.000

Nose rake			Base rake		
Orifice station, y, in.	Cp top	Cp side	Orifice station, y, in.	Cp top	Cp side
.010	.402	.731	.031	.171	.081
.030	1.107	1.209	.094	.369	.210
.050	1.328	1.222	.156	.508	.309
.070	1.322	1.213	.219	.630	.390
.090	1.315	1.188	.281	.768	.473
.110	1.315	1.116	.344	.853	.561
.130	1.305	1.119	.406	.923	.664
.150	1.294	1.137	.469	.982	.738
.170	1.268	1.149	.750	1.227	
.190	1.229	1.130	1.000	1.372	
			1.250	1.499	
			1.500	1.462	

[redacted]

TABLE 20. - PRESSURE COEFFICIENTS FOR AN INTERCONTINENTAL BALLISTIC MISSILE FOR NOSE IV WITH NATURAL TRANSITION AT M = 4.65 - Continued

(c) $\alpha = 0^{\circ}$

Model station, $\frac{x}{l}$	Cp for meridian angle, θ, deg –									Model station, $\frac{x}{l}$
	0	90	105	120	150	165	180	225	270	
.042							1.833			.042
.043							1.801			.043
.044							1.707			.044
.046							1.478			.046
.049							.833			.049
.053							.842			.053
.060	.095	.099	.097	.100	.100	.099	.097	.098		.060
.075	.114	.117	.122	.117	.119	.117	.115	.110		.075
.085	.123	.131	.143	.129	.128	.126	.124	.122	.111	.085
.096	.142									.096
.126		.095	.096	.097	.096	.095	.094	.089	.088	.126
.143							.010			.143
.154	.012	.012	.012	.011	.009		.008	.008	.009	.154
.171							.007			.171
.189							.005			.189
.206	.006	.005	.004	.005	.004	.003	.004	.004	.005	.206
.223							.002			.223
.241							.001			.241
.258	.003	.0	.002	.001	.000	.001	.001	.000	.021	.258
.275							.000			.275
.293							.000			.293
.310	.001	-.0	-.000	.000	-.000	-.001	-.000	-.000	-.000	.310
.327							-.000			.327
.344							-.000			.344
.362	-.000	-.003	-.003	-.001	-.000	-.002	.001	-.000	-.001	.362
.379							.003			.379
.396	.001	.004	.004	.005	.006	.003	.004	.004	-.001	.396
.408							.006			.408
.426	.028	.008	.034	.008	.008	.008	.007	.012	.025	.426
.451	.032	.021	.021	.017	.046	.017	.019	.022	.027	.451
.476	.029	.027	.027	.027	.026	.024	.025	.026	.026	.476
.501	.034		.025	.025	.025	.024	.026		.025	.501
.530	.004	-.003	-.005	-.006	-.006		-.004	-.003	-.005	.530
.548							-.005			.548
.566							-.005			.566
.584	-.001	-.006	-.005	-.006	-.005	-.005	-.003	-.003	-.007	.584
.602							-.003			.602
.620							-.004			.620
.638	-.001	-.006		-.001	-.006		-.004		-.006	.638
.655							-.003			.655
.673							-.003			.673
.691	-.001	-.006	-.005		-.007	-.003		-.003	-.005	.691
.709							-.003			.709
.727							-.003			.727
.745	-.001	.021		-.004	-.007		-.003		-.005	.745
.763							-.003			.763
.781							-.003			.781
.799							-.003			.799
.817	-.001	-.005	-.005	-.004	-.003	-.001	-.003	-.003	-.004	.817
.834							-.003			.834
.870							-.000			.870
.888							-.003			.888
.921	-.035									.921
.924	-.001	-.005		-.004			-.003			.924
.947							-.003			.947
.964							-.001			.964
.981	.001	-.002	-.005		-.004	-.004	-.002	-.002	-.003	.981
.984					-.005				-.004	.984
.998							-.004			.998
1.000	-.034									1.000

Nose rake			Base rake		
Orifice station, y, in.	Cp top	Cp side	Orifice station, y, in.	Cp top	Cp side
.010	.277	.750	.031	.097	.118
.030	1.017	1.241	.094	.178	.240
.050	1.266	1.238	.156	.229	.339
.070	1.243	1.236	.219	.291	.418
.090	1.227	1.206	.281	.332	.471
.110	1.229	1.137	.344	.383	.531
.130	1.209	1.128	.406	.438	.593
.150	1.190	1.137	.469	.491	.641
.170	1.165	1.158	.750	.699	
.190	1.123	1.146	1.000	.812	
			1.250	.948	
			1.500	.923	

[redacted]

TABLE 20. - PRESSURE COEFFICIENTS FOR AN INTERCONTINENTAL BALLISTIC MISSILE FOR NOSE IV WITH NATURAL TRANSITION AT M = 4.65 - Continued

(d) $\alpha = 3.0^{\circ}$

Model station, $\frac{x}{l}$	Cp for meridian angle, θ, deg –									Model station, $\frac{x}{l}$
	0	90	105	120	150	165	180	225	270	
.042							1.844			.042
.043							1.828			.043
.044							1.736			.044
.046							1.547			.046
.049							.989			.049
.053							.941			.053
.060	.069	.098	.102	.113	.124	.127	.126	.117		.060
.075	.081	.116	.129	.132	.145	.146	.146	.130		.075
.085	.095	.130	.148	.143	.152	.155	.152	.140	.110	.085
.096	.116									.096
.126		.096	.104	.112	.121	.124	.124	.111	.088	.126
.143							.024			.143
.154	.000	.010	.014	.016	.020		.022	.016	.011	.154
.171							.019			.171
.189							.017			.189
.206	-.000	.004	.006	.010	.013	.013	.015	.009	.002	.206
.223							.013			.223
.241							.011			.241
.258	-.003	.0	.003	.004	.009	.010	.010	.005	.018	.258
.275							.008			.275
.293							.007			.293
.310	-.003	-.002	-.000	.003	.004	.005	.005	.001	-.003	.310
.327							.004			.327
.344							.003			.344
.362	-.003	-.005	-.003	-.002	.001	.002	.002	-.000	-.005	.362
.379							.002			.379
.396	.001	-.0	.020	.001	.001	.002	.003	.000	-.002	.396
.408							.008			.408
.426	.017	.008	.037	.017	.022	.024	.024	.018	.019	.426
.451	.020	.021	.025	.028	.058	.040	.040	.032	.020	.451
.476	.022	.023	.027	.034	.043	.042	.043	.035	.021	.476
.501	.021		.029	.033	.042	.044	.043		.022	.501
.530	-.000	-.006	-.003	-.002	.002		.003	-.002	-.009	.530
.548							.004			.548
.566							.004			.566
.584	-.010	-.007	-.005	-.003	.002	.002	.003	-.002	-.009	.584
.602							.002			.602
.620							.002			.620
.638	-.008	-.007		-.000	.001		.002		-.009	.638
.655							.002			.655
.673							.001			.673
.691	-.006	-.007	-.006		.000	-.000		-.004	-.010	.691
.709							-.000			.709
.727							-.000			.727
.745	-.006	.020		-.005	-.001		-.000		-.009	.745
.763							.000			.763
.781							.000			.781
.799							.000			.799
.817	-.003	-.008	-.008	-.005	.000	-.000	-.000	-.004	-.010	.817
.834							.000			.834
.870							.000			.870
.888							.000			.888
.921	-.035									.921
.924	-.002	-.008		-.006			-.000			.924
.947							-.000			.947
.964							.000			.964
.981	-.000	-.007	-.008		-.001	.000	.000	-.004	-.007	.981
.984					-.001				-.009	.984
.998							-.004			.998
1.000	-.037									1.000

Nose rake			Base rake		
Orifice station, y, in.	C_p top	C_p side	Orifice station, y, in.	C_p top	C_p side
.010	.173	.745	.031	.065	.046
.030	.851	1.236	.094	.120	.289
.050	1.194	1.245	.156	.164	.593
.070	1.160	1.226	.219	.187	.687
.090	1.146	1.201	.281	.203	.724
.110	1.139	1.107	.344	.226	.752
.130	1.120	1.125	.406	.256	.798
.150	1.104	1.139	.469	.277	.807
.170	1.077	1.157	.750	.397	
.190	1.017	1.125	1.000	.473	
			1.250	.586	
			1.500	.604	

[redacted]

TABLE 20. - PRESSURE COEFFICIENTS FOR AN INTERCONTINENTAL BALLISTIC MISSILE FOR NOSE IV WITH NATURAL TRANSITION AT M = 4.65 - Concluded

(e) $\alpha = 6.3^{\circ}$

Model station, $\frac{x}{l}$	Cp for meridian angle, θ, deg –									Model station, $\frac{x}{l}$
	0	90	105	120	150	165	180	225	270	
.042							1.821			.042
.043							1.839			.043
.044							1.784			.044
.046							1.618			.046
.049							1.151			.049
.053							1.031			.053
.060	.043	.096	.109	.128	.155	.161	.162	.141		.060
.075	.055	.115	.136	.146	.177	.182	.184	.153		.075
.085	.066	.128	.156	.161	.187	.195	.194	.165	.111	.085
.096	.086									.096
.126		.095	.111	.127	.151	.158	.158	.136	.087	.126
.143							.041			.143
.154	-.006	.009	.015	.024	.036		.041	.026	.006	.154
.171							.037			.171
.189							.035			.189
.206	-.007	.001	.006	.015	.028	.029	.032	.017	-.001	.206
.223							.029			.223
.241							.026			.241
.258	-.007	-.002	.003	.007	.019	.021	.023	.010	.014	.258
.275							.021			.275
.293							.020			.293
.310	-.007	-.008	-.003	.002	.012	.017	.019	.005	-.011	.310
.327							.018			.327
.344							.016			.344
.362	-.006	-.012	-.007	-.001	.010	.013	.015	.001	-.014	.362
.379							.014			.379
.396	-.001	-.010	-.000	-.001	.009	.012	.013	.000	-.011	.396
.408							.013			.408
.426	.018	.004	.036	.021	.041	.051	.052	.028	.002	.426
.451	.021	.012	.023	.033	.079	.067	.069	.040	.007	.451
.476	.018	.015	.024	.035	.067	.071	.077	.046	.010	.476
.501	.020		.026	.039	.070	.075	.083		.010	.501
.530	-.003	-.011	-.006	.000	.017		.024	.004	-.014	.530
.548							.023			.548
.566							.020			.566
.584	-.012	-.013	-.009	-.002	.011	.015	.017	.000	-.016	.584
.602							.017			.602
.620							.014			.620
.638	-.010	-.014		-.000	.009		.016		-.017	.638
.655							.015			.655
.673							.015			.673
.691	-.008	-.016	-.011		.008	.013		-.003	-.017	.691
.709							.014			.709
.727							.015			.727
.745	-.007	.012		-.008	.008		.015		-.018	.745
.763							.015			.763
.781							.014			.781
.799							.015			.799
.817	-.007	-.017	-.013	-.008	.008	.013	.015	-.003	-.018	.817
.834							.015			.834
.870							.013			.870
.888							.014			.888
.921	-.036									.921
.924	-.006	-.017		-.008			.014			.924
.947							.014			.947
.964							.012			.964
.981	-.005	-.014	-.013		.007	.014	.013	-.003	-.016	.981
.984					.006				-.016	.984
.998							.009			.998
1.000	-.036									1.000

Nose rake			Base rake		
Orifice station, y, in.	Cp top	Cp side	Orifice station, y, in.	Cp top	Cp side
.010	.086	.747	.031	.083	.012
.030	.554	1.213	.094	.192	.440
.050	1.093	1.236	.156	.247	.754
.070	1.049	1.224	.219	.314	.835
.090	1.037	1.180	.281	.328	.892
.110	1.040	1.118	.344	.353	.948
.130	1.019	1.120	.406	.381	.991
.150	1.014	1.127	.469	.399	1.040
.170	.984	1.153	.750	.436	
.190	.945	1.127	1.000	.466	
			1.250	.514	
			1.500	.540	

[redacted]

TABLE 21. - PRESSURE COEFFICIENTS FOR AN INTERCONTINENTAL BALLISTIC MISSILE FOR NOSE V WITH NATURAL TRANSITION AT M = 1.57

(a) α = -10.1°

Model station, $\frac{x}{l}$	Cp for meridian angle, θ, deg – 0	90	105	120	150	165	180	225	270	Model station, $\frac{x}{l}$
.059							1.526			.059
.060							1.460			.060
.061							1.362			.061
.063							1.221			.063
.064							1.092			.064
.075	-.353	-.408	-.407	-.407	-.407	-.408	-.407	-.408	-.408	.075
.085	.273	-.120	-.189	-.273	-.404	-.406	-.407	-.344	-.134	.095
.096	.548		-.034	-.121	-.255	-.278	-.309	-.210	.008	.096
.119	.402	.123	.063	.014		-.111	-.133	-.044	.111	.119
.143							-.257			.143
.154	-.011	-.180	-.215	-.237	-.242	-.219	-.195	-.250		.154
.171							-.147			.171
.189							-.110			.189
.206	.027	-.164	-.190	-.207	-.123	-.096	-.084	-.157		.206
.223							-.057			.223
.241							-.041			.241
.258	.023	-.171	-.194	-.144	-.063	-.037	-.028	-.084	-.179	.258
.275							-.019			.275
.293							-.011			.293
.310	.019	-.179	-.143	-.082	-.048	-.019	-.006	-.057	-.182	.310
.327							-.002			.327
.344							-.000			.344
.362	.015	-.136	-.099	-.061	-.057	-.015	.003	-.052	-.129	.362
.379							.003			.379
.396	.009	-.115	-.088	-.036	-.052	-.009	.014	-.027	-.110	.396
.408							.018			.408
.426	.220	.075	.090	.079	.050	.163	.213	.077	.087	.426
.451	.207	.065	.059	.075	.042	.113	.139		.063	.451
.476	.198	.047	.041	.061	.029	.105	.111	.072	.049	.476
.501	.191	.038	.034	.043	.007	.076	.079	.039	.039	.501
.530	-.003	-.130	-.138	-.112	-.112	-.131	-.108	-.089	-.132	.530
.548							-.107			.548
.566							-.063			.566
.584	.025	-.121	-.107	-.090	-.083	-.064	-.054	-.081	-.124	.584
.602							-.046			.602
.620							-.037			.620
.638	.032	-.106		-.075	-.045				-.103	.638
.655							-.026			.655
.673							-.025			.673
.691	.031	-.124	-.101	-.060	-.043	-.045	-.022	-.038	-.106	.691
.709							-.024			.709
.727							-.020			.727
.745	.026	-.111		-.047	-.033		-.020		-.098	.745
.763							-.019			.763
.781							-.027			.781
.799							-.019			.799
.817	.044	-.089	-.056	-.033	-.030	-.025	-.009	-.030	-.077	.817
.834							-.020			.834
.852							-.010			.852
.870							-.009			.870
.888							.016			.888
.906							.040			.906
.921	-.170									.921
.924	.051	-.063		-.009	.004		.051		-.084	.924
.947							.039			.947
.964							.040			.964
.981	.058	-.013	.025		.006	.004	.034	.012	-.034	.981
1.000	-.177									1.000

Nose rake			Base rake		
Orifice station, y, in.	C_p top	C_p side	Orifice station, y, in.	C_p top	C_p side
.010	1.095		.031	.869	.437
.030	1.182		.094	1.567	1.004
.050	1.197		.156	1.637	1.477
.070	1.249		.219	1.569	1.622
.090	1.302		.281	1.579	1.591
.110	1.354		.344	1.569	1.514
.130	1.396		.406	1.568	1.520
.150	1.425		.469	1.573	1.513
.170	1.435		.750	1.566	
.190	1.392		1.000	1.566	
			1.250	1.568	
			1.500	1.577	

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TABLE 21. - PRESSURE COEFFICIENTS FOR AN INTERCONTINENTAL BALLISTIC MISSILE FOR NOSE V WITH NATURAL TRANSITION AT M = 1.57 - Continued

(b) $\alpha = -6.3^{\circ}$

Model station, $\frac{x}{l}$	Cp for meridian angle, θ, deg –									Model station, $\frac{x}{l}$
	0	90	105	120	150	165	180	225	270	
.059							1.542			.059
.060							1.493			.060
.061							1.411			.061
.063							1.289			.063
.064							1.157			.064
.075	-.402	-.424	-.423	-.423	-.422	-.422	-.421	-.422	-.422	.075
.085	.099	-.124	-.186	-.238	-.367	-.381	-.367	-.324	-.155	.085
.096	.391		-.033	-.087	-.176	-.192	-.214	-.146	-.028	.096
.119	.311	.129	.089	.053		-.033	-.049	.008	.115	.119
.143							-.247			.143
.154	-.070	-.161	-.179	-.194	-.211	-.205	-.195	-.209		.154
.171							-.157			.171
.189							-.117			.189
.206	-.026	-.124	-.137	-.146	-.105	-.091	-.085	-.117		.206
.223							-.060			.223
.241							-.049			.241
.258	-.021	-.101	-.099	-.082	-.051	-.039	-.037	-.059	-.102	.258
.275							-.031			.275
.293							-.024			.293
.310	-.016	-.073	-.070	-.053	-.029	-.018	-.016	-.036	-.076	.310
.327							-.009			.327
.344							-.007			.344
.362	-.015	-.063	-.051	-.033	-.020	-.012	-.007	-.022	-.062	.362
.379							-.008			.379
.396	-.015	-.053	-.047	-.037	-.016	-.009	.000	-.019	-.052	.396
.408							.031			.408
.426	.192	.136	.138	.132	.127	.148	.162	.125	.139	.426
.451	.181	.118	.111	.109	.112	.118	.131		.114	.451
.476	.172	.099	.089	.088	.090	.097	.105	.095	.100	.476
.501	.162	.087	.078	.071	.058	.077	.092	.061	.087	.501
.530	-.031	-.095	-.103	-.106	-.080	-.088	-.113	-.076	-.096	.530
.548							-.077			.548
.566							-.055			.566
.584	-.003	-.075	-.068	-.068	-.062	-.057	-.050	-.060	-.077	.584
.602							-.042			.602
.620							-.034			.620
.638	.001	-.060		-.052	-.038				-.059	.638
.655							-.016			.655
.673							-.020			.673
.691	.002	-.065	-.058	-.045	-.028	-.026	-.008	-.022	-.051	.691
.709							-.014			.709
.727							-.011			.727
.745	.012	-.054		-.035	-.021		-.007		-.044	.745
.763							-.004			.763
.781							-.012			.781
.799							-.003			.799
.817	.017	-.042	-.035	-.023	-.013	-.007	.004	-.012	-.029	.817
.834							-.000			.834
.852							.003			.852
.870							.010			.870
.888							.009			.888
.906							.012			.906
.921	-.129									.921
.924	.025	-.023		-.002	.030		.085		-.036	.924
.947							.061			.947
.964							.057			.964
.981	.050	.008	.029		.036	.039	.047	.027	-.002	.981
1.000	-.140									1.000

Nose rake			Base rake		
Orifice station, y, in.	Cp top	Cp side	Orifice station, y, in.	Cp top	Cp side
.010	1.058		.031	.739	.503
.030	1.244		.094	1.270	.884
.050	1.312		.156	1.564	1.217
.070	1.348		.219	1.557	1.472
.090	1.382		.281	1.535	1.554
.110	1.413		.344	1.545	1.521
.130	1.438		.406	1.544	1.516
.150	1.453		.469	1.551	1.512
.170	1.447		.750	1.547	
.190	1.389		1.000	1.553	
			1.250	1.550	
			1.500	1.544	

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TABLE 21. - PRESSURE COEFFICIENTS FOR AN INTERCONTINENTAL BALLISTIC MISSILE FOR NOSE V WITH NATURAL TRANSITION AT M = 1.57 - Continued

(c) $\alpha = -3.0^{\circ}$

Model station, $\frac{x}{l}$	Cp for meridian angle, θ, deg – 0	90	105	120	150	165	180	225	270	Model station, $\frac{x}{l}$
.059							1.550			.059
.060							1.515			.060
.061							1.447			.061
.063							1.334			.063
.064							1.208			.064
.075	-.397	-.408	-.408	-.409	-.409	-.410	-.411	-.409	-.408	.075
.085	-.032	-.136	-.171	-.203	-.271	-.270	-.278	-.246	-.170	.085
.096	.231		-.017	-.044	-.095	-.108	-.118	-.088	-.044	.096
.119	.230	.126	.105	.086		.041	.030	.055	.109	.119
.143							-.216			.143
.154	-.111	-.146	-.155	-.166	-.176	-.176	-.172	-.178		.154
.171							-.144			.171
.189							-.115			.189
.206	-.060	-.093	-.096	-.108	-.094	-.092	-.091	-.096		.206
.223							-.070			.223
.241							-.060			.241
.258	-.043	-.059	-.061	-.061	-.051	-.045	-.048	-.053	-.059	.258
.275							-.037			.275
.293							-.025			.293
.310	-.029	-.045	-.041	-.031	-.023	-.017	-.017	-.025	-.045	.310
.327							-.017			.327
.344							-.015			.344
.362	-.020	-.025	-.020	-.018	-.019	-.015	-.013	-.018	-.025	.362
.379							-.012			.379
.396	-.019	-.023	-.024	-.021	-.012	-.009	-.002	-.014	-.023	.396
.408							.023			.408
.426	.184	.164	.165	.162	.161	.164	.162	.162	.162	.426
.451	.166	.145	.141	.138	.134	.131	.135		.141	.451
.476	.149	.124	.115	.112	.112	.112	.113	.115	.126	.476
.501	.136	.108	.105	.098	.094	.094	.096	.096	.108	.501
.530	-.051	-.073	-.077	-.082	-.079	-.081	-.081	-.076	-.077	.530
.548							-.066			.548
.566							-.051			.566
.584	-.011	-.049	-.049	-.051	-.043	-.043	-.042	-.048	-.050	.584
.602							-.042			.602
.620							-.034			.620
.638	-.015	-.029		-.030	-.026				-.027	.638
.655							-.023			.655
.673							-.021			.673
.691	-.011	-.035	-.033	-.033	-.029	-.024	-.014	-.017	-.023	.691
.709							-.010			.709
.727							-.010			.727
.745	-.004	-.027		-.021	-.012		-.004		-.017	.745
.763							-.007			.763
.781							-.012			.781
.799							-.004			.799
.817	.008	-.011	-.011	-.011	-.005	-.002	.000	-.004	.000	.817
.834							-.002			.834
.852							.003			.852
.870							.003			.870
.888							.011			.888
.906							.007			.906
.921	-.073									.921
.924	.019	-.002		-.006	.005		.013		-.016	.924
.947							.008			.947
.964							.012			.964
.981	.035	.020	.007		.008	.009	.007	.002	.007	.981
1.000	-.079									1.000

Nose rake			Base rake		
Orifice station, y, in.	C_p top	C_p side	Orifice station, y, in.	C_p top	C_p side
.010	.957		.031	.608	.504
.030	1.271		.094	.953	.750
.050	1.375		.156	1.227	.958
.070	1.426		.219	1.416	1.163
.090	1.463		.281	1.466	1.329
.110	1.480		.344	1.481	1.425
.130	1.466		.406	1.487	1.460
.150	1.467		.469	1.494	1.466
.170	1.434		.750	1.505	
.190	1.348		1.000	1.519	
			1.250	1.523	
			1.500	1.530	

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TABLE 21. - PRESSURE COEFFICIENTS FOR AN INTERCONTINENTAL BALLISTIC MISSILE FOR NOSE V WITH NATURAL TRANSITION AT $M = 1.57$ - Continued

(d) $\alpha = 0^{\circ}$

Model station, $\frac{x}{l}$	Cp for meridian angle, θ, deg – 0	90	105	120	150	165	180	225	270	Model station, $\frac{x}{l}$
.059							1.555			.059
.060							1.537			.060
.061							1.480			.061
.063							1.382			.063
.064							1.260			.064
.075	-.398	-.406	-.405	-.406	-.407	-.408	-.412	-.407	-.406	.075
.085	-.146	-.141	-.145	-.145	-.164	-.153	-.167	-.161	-.174	.085
.096	.073		.003	.003	-.007	-.013	-.011	-.019	-.050	.096
.119	.149	.124	.124	.125		.119	.110	.107	.106	.119
.143							-.186			.143
.154	-.146	-.139	-.145	-.146	-.150	-.149	-.143	-.155		.154
.171							-.123			.171
.189							-.100			.189
.206	-.081	-.083	-.081	-.089	-.080	-.080	-.081	-.082		.206
.223							-.063			.223
.241							-.056			.241
.258	-.055	-.045	-.047	-.046	-.050	-.049	-.052	-.046	-.044	.258
.275							-.045			.275
.293							-.037			.293
.310	-.028	-.033	-.033	-.026	-.027	-.021	-.022	-.026	-.035	.310
.327							-.019			.327
.344							-.020			.344
.362	-.018	-.016	-.012	-.011	-.021	-.018	-.017	-.017	-.015	.362
.379							-.018			.379
.396	-.018	-.012	-.016	-.017	-.014	-.014	-.007	-.014	-.012	.396
.408							-.011			.408
.426	.172	.173	.176	.175	.173	.177	.175	.173	.172	.426
.451	.148	.153	.152	.154	.149	.144	.147		.149	.451
.476	.130	.132	.128	.127	.128	.127	.127	.130	.135	.476
.501	.114	.115	.118	.115	.115	.113	.114	.116	.116	.501
.530	-.066	-.066	-.067	-.072	-.069	-.069	-.070	-.068	-.070	.530
.548							-.056			.548
.566							-.042			.566
.584	-.026	-.040	-.038	-.041	-.038	-.037	-.032	-.038	-.043	.584
.602							-.036			.602
.620							-.031			.620
.638	-.025	-.018		-.022	-.021				-.017	.638
.655							-.021			.655
.673							-.021			.673
.691	-.015	-.025	-.024	-.024	-.030	-.027	-.015	-.013	-.016	.691
.709							-.012			.709
.727							-.011			.727
.745	-.012	-.017		-.013	-.012		-.005		-.009	.745
.763							-.009			.763
.781							-.016			.781
.799							-.007			.799
.817	.003	-.005	-.007	-.006	-.005	-.003	-.000	-.000	.006	.817
.834							-.005			.834
.852							.002			.852
.870							.004			.870
.888							.006			.888
.906							.009			.906
.921	-.064									.921
.924	.014	.008		-.005	.005		.010		-.001	.924
.947							.007			.947
.964							.012			.964
.981	.047	.031	.013		.011	.009	.006	.007	.009	.981
1.000	-.066									1.000

Nose rake			Base rake		
Orifice station, y, in.	Cp top	Cp side	Orifice station, y, in.	Cp top	Cp side
.010	.776		.031	.474	.484
.030	1.305		.094	.676	.670
.050	1.476		.156	.836	.819
.070	1.509		.219	.983	.968
.090	1.505		.281	1.110	1.106
.110	1.449		.344	1.235	1.226
.130	1.411		.406	1.326	1.326
.150	1.395		.469	1.379	1.396
.170	1.357		.750	1.434	
.190	1.290		1.000	1.459	
			1.250	1.473	
			1.500	1.489	

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TABLE 21. - PRESSURE COEFFICIENTS FOR AN INTERCONTINENTAL BALLISTIC MISSILE FOR NOSE V WITH NATURAL TRANSITION AT M = 1.57 - Continued

(e) $\alpha = 3.0^{\circ}$

Model station, $\frac{x}{l}$	Cp for meridian angle, θ, deg –									Model station, $\frac{x}{l}$
	0	90	105	120	150	165	180	225	270	
.059							1.553			.059
.060							1.549			.060
.061							1.511			.061
.063							1.425			.063
.064							1.306			.064
.075	-.389	-.397	-.396	-.396	-.397	-.398	-.400	-.398	-.397	.075
.085	-.310	-.138	-.113	-.084	-.064	-.043	-.050	-.082	-.177	.085
.096	-.079		.035	.061	.086	.092	.099	.058	-.046	.096
.119	.067	.127	.146	.165		.196	.191	.163	.107	.119
.143							-.150			.143
.154	-.176	-.145	-.138	-.130	-.119	-.116	-.108	-.133		.154
.171							-.093			.171
.189							-.074			.189
.206	-.090	-.094	-.081	-.084	-.064	-.060	-.059	-.073		.206
.223							-.045			.223
.241							-.043			.241
.258	-.050	-.056	-.055	-.051	-.041	-.038	-.041	-.047	-.056	.258
.275							-.045			.275
.293							-.035			.293
.310	-.023	-.043	-.045	-.035	-.032	-.027	-.026	-.037	-.044	.310
.327							-.019			.327
.344							-.020			.344
.362	-.013	-.027	-.022	-.018	-.022	-.019	-.017	-.023	-.024	.362
.379							-.019			.379
.396	-.011	-.020	-.025	-.024	-.018	-.016	-.009	-.022	-.020	.396
.408							-.016			.408
.426	.161	.165	.170	.172	.176	.184	.182	.171	.163	.426
.451	.135	.145	.149	.155	.164	.160	.165		.141	.451
.476	.113	.125	.126	.132	.143	.145	.146	.139	.128	.476
.501	.095	.108	.118	.120	.134	.134	.137	.128	.110	.501
.530	-.077	-.072	-.070	-.070	-.057	-.054	-.054	-.060	-.076	.530
.548							-.040			.548
.566							-.028			.566
.584	-.040	-.047	-.042	-.039	-.030	-.025	-.019	-.033	-.050	.584
.602							-.024			.602
.620							-.022			.620
.638	-.028	-.027		-.023	-.014				-.024	.638
.655							-.013			.655
.673							-.014			.673
.691	-.015	-.034	-.030	-.027	-.029	-.023	-.010	-.016	-.023	.691
.709							-.007			.709
.727							-.010			.727
.745	-.010	-.025		-.020	-.008		-.004		-.016	.745
.763							-.008			.763
.781							-.015			.781
.799							-.005			.799
.817	.003	-.014	-.013	-.011	-.006	-.001	.002	-.003	-.003	.817
.834							-.003			.834
.852							.006			.852
.870							.004			.870
.888							.011			.888
.906							.009			.906
.921	-.069									.921
.924	.007	.001		-.009	.004		.013		-.009	.924
.947							.012			.947
.964							.017			.964
.981	.059	.021	.003		.011	.011	.011	.005	.001	.981
1.000	-.077									1.000

Nose rake			Base rake		
Orifice station, y, in.	C_p top	C_p side	Orifice station, y, in.	C_p top	C_p side
.010	.633		.031	.416	.504
.030	1.268		.094	.573	.734
.050	1.488		.156	.683	.929
.070	1.505		.219	.779	1.129
.090	1.393		.281	.855	1.291
.110	1.324		.344	.945	1.396
.130	1.308		.406	1.021	1.442
.150	1.299		.469	1.083	1.455
.170	1.277		.750	1.305	
.190	1.210		1.000	1.380	
			1.250	1.390	
			1.500	1.416	

[redacted]

TABLE 21. - PRESSURE COEFFICIENTS FOR AN INTERCONTINENTAL BALLISTIC MISSILE FOR NOSE V WITH NATURAL TRANSITION AT M = 1.57 - Continued

(f) $\alpha = 6.3^{\circ}$

Model station, $\frac{x}{l}$	Cp for meridian angle, θ, deg –									Model station, $\frac{x}{l}$
	0	90	105	120	150	165	180	225	270	
.059							1.544			.059
.060							1.558			.060
.061							1.533			.061
.063							1.461			.063
.064							1.349			.064
.075	-.400	-.410	-.409	-.407	-.405	-.405	-.401	-.408	-.410	.075
.085	-.403	-.127	-.077	-.018	.046	.072	.088	.007	-.166	.085
.096	-.188		.076	.126	.185	.205	.215	.144	-.033	.096
.119	-.018	.130	.167	.205		.272	.270	.218	.107	.119
.143							-.111			.143
.154	-.202	-.155	-.137	-.117	-.086	-.077	-.067	-.111		.154
.171							-.054			.171
.189							-.039			.189
.206	-.089	-.116	-.098	-.086	-.042	-.032	-.029	-.065		.206
.223							-.019			.223
.241							-.019			.241
.258	-.039	-.097	-.090	-.065	-.029	-.017	-.019	-.051	-.098	.258
.275							-.022			.275
.293							-.020			.293
.310	-.017	-.073	-.073	-.058	-.031	-.019	-.015	-.053	-.074	.310
.327							-.021			.327
.344							-.019			.344
.362	-.006	-.061	-.059	-.049	-.036	-.017	-.012	-.043	-.057	.362
.379							-.012			.379
.396	-.007	-.048	-.049	-.043	-.019	-.012	-.002	-.037	-.048	.396
.408							-.013			.408
.426	.160	.138	.143	.149	.174	.190	.189	.159	.138	.426
.451	.130	.118	.127	.138	.168	.172	.180		.117	.451
.476	.105	.100	.108	.127	.165	.176	.179	.146	.103	.476
.501	.087	.091	.108	.116	.149	.157	.163	.136	.090	.501
.530	-.101	-.090	-.081	-.072	-.043	-.037	-.035	-.058	-.098	.530
.548							-.018			.548
.566							-.008			.566
.584	-.045	-.070	-.059	-.046	-.020	-.014	-.007	-.033	-.075	.584
.602							-.003			.602
.620							.006			.620
.638	-.028	-.056		-.028	-.006				-.053	.638
.655							.003			.655
.673							-.001			.673
.691	-.017	-.061	-.055	-.041	-.026	-.012	.002	-.023	-.049	.691
.709							-.000			.709
.727							.003			.727
.745	-.001	-.052		-.038	-.006		.004		-.042	.745
.763							.010			.763
.781							-.007			.781
.799							.000			.799
.817	.007	-.038	-.036	-.030	-.007	.005	.012	-.015	-.027	.817
.834							.004			.834
.852							.014			.852
.870							.015			.870
.888							.015			.888
.906							.021			.906
.921	-.118									.921
.924	.029	-.019		-.025	.004		.021		-.034	.924
.947							.020			.947
.964							.026			.964
.981	.074	.002	-.018		.014	.019	.019	-.002	-.013	.981
1.000	-.132									1.000

Nose rake			Base rake		
Orifice station, y, in.	Cp top	Cp side	Orifice station, y, in.	Cp top	Cp side
.010	.450		.031	.643	.516
.030	1.143		.094	.970	.888
.050	1.442		.156	1.174	1.208
.070	1.389		.219	1.280	1.463
.090	1.215		.281	1.327	1.531
.110	1.200		.344	1.352	1.500
.130	1.183		.406	1.364	1.495
.150	1.182		.469	1.377	1.504
.170	1.152		.750	1.387	
.190	1.065		1.000	1.396	
			1.250	1.403	
			1.500	1.410	

[redacted]

TABLE 21. - PRESSURE COEFFICIENTS FOR AN INTERCONTINENTAL BALLISTIC MISSILE FOR NOSE V WITH NATURAL TRANSITION AT M = 1.57 - Concluded

(g) $\alpha = 10.1^{\circ}$

Model station, $\frac{x}{l}$	Cp for meridian angle, θ, deg –									Model station, $\frac{x}{l}$
	0	90	105	120	150	165	180	225	270	
.059							1.529			.059
.060							1.563			.060
.061							1.555			.061
.063							1.506			.063
.064							1.411			.064
.075	-.428	-.440	-.434	-.423	-.389	-.353	-.308	-.404	-.443	.075
.085	-.432	-.100	-.015	.089	.201	.244	.259	.141	-.141	.085
.096	-.295		.140	.212	.311	.338	.351	.252	.000	.096
.119	-.111	.122	.182	.243		.364	.366	.278	.102	.119
.143							-.059			.143
.154	-.205	-.178	-.142	-.101	-.040	-.022	-.010	-.080		.154
.171							.002			.171
.189							.015			.189
.206	-.086	-.159	-.123	-.088	-.007	.015	.021	-.046		.206
.223							.028			.223
.241							.023			.241
.258	-.032	-.165	-.130	-.084	-.002	.021	.021	-.049	-.172	.258
.275							.016			.275
.293							.014			.293
.310	-.008	-.178	-.141	-.093	-.016	.008	.017	-.060	-.179	.310
.327							.011			.327
.344							.011			.344
.362	.002	-.132	-.152	-.103	-.019	.009	.018	-.066	-.122	.362
.379							.013			.379
.396	.002	-.107	-.120	-.111	-.020	.005	.019	-.073	-.105	.396
.408							.007			.408
.426	.213	.079	.069	.083	.166	.211	.217	.112	.086	.426
.451	.135	.066	.074	.093	.161	.188	.205		.068	.451
.476	.106	.049	.067	.099	.163	.187	.196	.134	.052	.476
.501	.082	.041	.065	.093	.161	.183	.194	.131	.040	.501
.530	-.109	-.128	-.112	-.088	-.029	-.012	-.005	-.056	-.133	.530
.548							.009			.548
.566							.022			.566
.584	-.051	-.116	-.093	-.067	-.002	.015	.025	-.036	-.121	.584
.602							.033			.602
.620							.026			.620
.638	-.033	-.102		-.060	.006				-.096	.638
.655							.033			.655
.673							.029			.673
.691	-.021	-.119	-.100	-.072	-.015	.011	.031	-.033	-.104	.691
.709							.035			.709
.727							.029			.727
.745	-.014	-.107		-.071	-.001		.028		-.094	.745
.763							.025			.763
.781							.014			.781
.799							.023			.799
.817	-.005	-.086	-.090	-.070	-.003	.024	.035	-.032	-.074	.817
.834							.029			.834
.852							.036			.852
.870							.039			.870
.888							.036			.888
.906							.038			.906
.921	-.161									.921
.924	.047	-.061		-.062	.003		.043		-.078	.924
.947							.042			.947
.964							.049			.964
.981	.046	-.030	-.064		.017	.036	.042	-.016	-.051	.981
1.000	-.171									1.000

Nose rake			Base rake		
Orifice station, y, in.	C_p top	C_p side	Orifice station, y, in.	C_p top	C_p side
.010	.289		.031	.807	.457
.030	.979		.094	1.321	1.028
.050	1.276		.156	1.391	1.487
.070	1.136		.219	1.356	1.622
.090	1.022		.281	1.361	1.546
.110	.974		.344	1.357	1.500
.130	.900		.406	1.359	1.511
.150	.808		.469	1.363	1.512
.170	.741		.750	1.360	
.190	.714		1.000	1.377	
			1.250	1.392	
			1.500	1.401	

[redacted]

TABLE 22. - PRESSURE COEFFICIENTS FOR AN INTERCONTINENTAL BALLISTIC MISSILE FOR NOSE V WITH NATURAL TRANSITION AT M = 2.29

(a) $\alpha = -10.1^{\circ}$

Model station, $\frac{x}{l}$	Cp for meridian angle, θ, deg –									Model station, $\frac{x}{l}$
	0	90	105	120	150	165	180	225	270	
.059							1.638			.059
.060							1.563			.060
.061							1.462			.061
.063							1.338			.063
.064							1.213			.064
.075	-.096	-.163	-.166	-.182	-.176	-.175	-.174	-.179	-.163	.075
.085	.275	.022	-.024	-.073	-.139	-.149	-.153	-.119	.018	.085
.096	.356		.038	-.009	-.080	-.108	-.108	-.056	.074	.096
.119	.324	.114	.073	.037	-.019	-.036	-.046	.002	.112	.119
.143							-.142			.143
.154	.041	-.073	-.094	-.112	-.130		-.128	-.123	-.076	.154
.171							-.108			.171
.189							-.090			.189
.206	.041	-.076	-.095	-.108	-.097	-.082	-.075	-.107	-.077	.206
.223							-.062			.223
.241							-.053			.241
.258	.036	-.088	-.107	-.116	-.069	-.051	-.044	-.090	-.087	.258
.275							-.036			.275
.293							-.033			.293
.310	.035	-.102	-.122	-.113	-.053	-.037	-.028	-.065	-.101	.310
.327							-.025			.327
.344							-.022			.344
.362	.033	-.113	-.133	-.075	-.053	-.034	-.020	-.055	-.114	.362
.379							-.017			.379
.396	.028	-.121	-.121	-.065	-.058	-.031	-.012	-.054	-.121	.396
.408							-.013			.408
.426	.164	-.056	-.004	.004	.000	.082	.090	.009	-.058	.426
.451	.167	-.051	-.003	.010	-.001	.055	.087	.015	-.053	.451
.476	.167	-.045	-.002	.014	-.012	.046	.058	.015	-.043	.476
.501	.166		-.001	.011	-.022	.036	.042		-.028	.501
.530	.022	-.102	-.088	-.059	-.100		-.055	-.058	-.099	.530
.548							-.058			.548
.566							-.057			.566
.584	.026	-.094	-.074	-.059	-.089	-.050	-.042	-.061	-.091	.584
.602							-.037			.602
.620							-.033			.620
.638	.025	-.091		-.063	-.068		-.029		-.091	.638
.655							-.027			.655
.673							-.027			.673
.691	.024	-.094	-.081		-.052	-.038		-.051	-.093	.691
.709							-.028			.709
.727							-.027			.727
.745	.026	-.093		-.048	-.046		-.027		-.093	.745
.763							-.027			.763
.781							-.031			.781
.799							-.031			.799
.817	.025	-.097	-.055	-.042	-.046	-.040	-.027	-.038	-.096	.817
.834							-.029			.834
.870							-.027			.870
.888							-.028			.888
.921	-.166									.921
.924	.024	-.072		-.040			-.026			.924
.947							-.028			.947
.964							-.029			.964
.981	.051	-.058	-.036		-.040	-.041	-.028	-.038	-.066	.981
.984					-.045				-.078	.984
.998							-.030			.998
1.000	-.168									1.000

Nose rake			Base rake		
Orifice station, y, in.	Cp top	Cp side	Orifice station, y, in.	Cp top	Cp side
.010	1.072		.031	.752	.249
.030	1.362		.094	1.699	.795
.050	1.455		.156	1.715	1.310
.070	1.489		.219	1.745	1.393
.090	1.515		.281	1.744	1.442
.110	1.501		.344	1.755	1.462
.130	1.519		.406	1.753	1.450
.150	1.531		.469	1.749	1.499
.170	1.521		.750	1.752	
.190	1.474		1.000	1.748	
			1.250	1.722	
			1.500	1.708	

[redacted]

TABLE 22. - PRESSURE COEFFICIENTS FOR AN INTERCONTINENTAL BALLISTIC MISSILE FOR NOSE V WITH NATURAL TRANSITION AT M = 2.29 - Continued

(b) $\alpha = -6.3^{\circ}$

Model station, $\frac{x}{l}$	Cp for meridian angle, θ, deg –									Model station, $\frac{x}{l}$
	0	90	105	120	150	165	180	225	270	
.059							1.658			.059
.060							1.598			.060
.061							1.535			.061
.063							1.410			.063
.064							1.284			.064
.075	-.128	-.148	-.149	-.150	-.149	-.149	-.149	-.149	-.147	.075
.085	.159	.013	-.023	-.055	-.114	-.121	-.118	-.092	.004	.085
.096	.237		.051	.017	-.028	-.047	-.049	-.016	.062	.096
.119	.245	.115	.087	.064	.028	.015	.010	.040	.111	.119
.143							-.120			.143
.154	-.006	-.069	-.082	-.094	-.107		-.108	-.102	-.071	.154
.171							-.094			.171
.189							-.082			.189
.206	.000	-.060	-.069	-.077	-.075	-.073	-.071	-.077	-.060	.206
.223							-.059			.223
.241							-.051			.241
.258	-.000	-.059	-.066	-.068	-.052	-.046	-.044	-.059	-.057	.258
.275							-.038			.275
.293							-.035			.293
.310	-.002	-.063	-.067	-.059	-.039	-.031	-.030	-.043	-.060	.310
.327							-.027			.327
.344							-.024			.344
.362	-.003	-.065	-.060	-.048	-.030	-.025	-.022	-.034	-.059	.362
.379							-.021			.379
.396	-.005	-.062	-.056	-.043	-.026	-.020	-.017	-.032	-.057	.396
.408							-.017			.408
.426	.115	.033	.048	.054	.060	.071	.078	.057	.038	.426
.451	.114	.039	.042	.047	.058	.061	.068	.052	.040	.451
.476	.115	.040	.038	.041	.045	.051	.054	.045	.040	.476
.501	.113		.035	.035	.036	.040	.044		.039	.501
.530	-.011	-.057	-.060	-.059	-.049		-.056	-.051	-.057	.530
.548							-.052			.548
.566							-.041			.566
.584	-.005	-.054	-.054	-.048	-.042	-.039	-.035	-.043	-.053	.584
.602							-.030			.602
.620							-.026			.620
.638	-.003	-.052		-.042	-.030		-.023		-.052	.638
.655							-.020			.655
.673							-.020			.673
.691	-.001	-.054	-.048		-.027	-.024		-.028	-.051	.691
.709							-.017			.709
.727							-.015			.727
.745	.000	-.049		-.029	-.023		-.015		-.048	.745
.763							-.015			.763
.781							-.017			.781
.799							-.015			.799
.817	.001	-.044	-.034	-.025	-.022	-.018	-.010	-.020	-.039	.817
.834							-.013			.834
.870							-.010			.870
.888							-.009			.888
.921	-.149									.921
.924	.006	-.038		-.024			-.008			.924
.947							-.009			.947
.964							-.006			.964
.981	.016	-.034	-.023		-.016	-.012	-.008	-.016	-.032	.981
.984					-.020				-.037	.984
.998							-.011			.998
1.000	-.149									1.000

Nose rake			Base rake		
Orifice station, y, in.	C_p top	C_p side	Orifice station, y, in.	C_p top	C_p side
.010	.957		.031	.581	.334
.030	1.409		.094	1.233	.750
.050	1.514		.156	1.443	1.063
.070	1.532		.219	1.578	1.222
.090	1.485		.281	1.589	1.359
.110	1.466		.344	1.602	1.415
.130	1.473		.406	1.609	1.436
.150	1.477		.469	1.616	1.455
.170	1.468		.750	1.631	
.190	1.416		1.000	1.644	
			1.250	1.659	
			1.500	1.666	

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TABLE 22. - PRESSURE COEFFICIENTS FOR AN INTERCONTINENTAL BALLISTIC MISSILE FOR NOSE V WITH NATURAL TRANSITION AT M = 2.29 - Continued

(c) $\alpha = -3.0^{\circ}$

Model station, $\frac{x}{l}$	Cp for meridian angle, θ, deg –									Model station, $\frac{x}{l}$
	0	90	105	120	150	165	180	225	270	
.059							1.668			.059
.060							1.641			.060
.061							1.572			.061
.063							1.463			.063
.064							1.343			.064
.075	-.137	-.142	-.143	-.144	-.145	-.145	-.146	-.144	-.143	.075
.085	.067	.005	-.010	-.025	-.055	-.059	-.054	-.042	-.000	.085
.096	.145		.057	.038	.019	.009	.011	.021	.049	.096
.119	.182	.113	.099	.089	.070	.064	.062	.073	.110	.119
.143							-.099			.143
.154	-.041	-.068	-.073	-.080	-.088		-.089	-.086	-.070	.154
.171							-.080			.171
.189							-.070			.189
.206	-.028	-.051	-.053	-.059	-.061	-.063	-.064	-.060	-.051	.206
.223							-.057			.223
.241							-.051			.241
.258	-.026	-.042	-.045	-.047	-.044	-.044	-.046	-.045	-.040	.258
.275							-.042			.275
.293							-.039			.293
.310	-.023	-.040	-.041	-.040	-.037	-.034	-.034	-.033	-.036	.310
.327							-.031			.327
.344							-.029			.344
.362	-.020	-.036	-.035	-.033	-.029	-.027	-.027	-.027	-.031	.362
.379							-.025			.379
.396	-.020	-.033	-.033	-.031	-.025	-.024	-.025	-.025	-.029	.396
.408							-.021			.408
.426	.093	.068	.073	.071	.074	.076	.076	.075	.072	.426
.451	.087	.066	.065	.065	.071	.068	.069	.068	.067	.451
.476	.085	.062	.059	.058	.059	.060	.061	.060	.063	.476
.501	.082		.056	.053	.053	.052	.053		.059	.501
.530	-.029	-.041	-.044	-.045	-.044		-.045	-.044	-.041	.530
.548							-.042			.548
.566							-.038			.566
.584	-.021	-.034	-.034	-.035	-.038	-.039	-.037	-.034	-.033	.584
.602							-.032			.602
.620							-.026			.620
.638	-.018	-.029		-.032	-.027		-.023		-.028	.638
.655							-.021			.655
.673							-.020			.673
.691	-.016	-.031	-.030		-.024	-.023		-.022	-.027	.691
.709							-.018			.709
.727							-.017			.727
.745	-.013	-.025		-.021	-.018		-.014		-.022	.745
.763							-.014			.763
.781							-.017			.781
.799							-.015			.799
.817	-.010	-.021	-.019	-.017	-.017	-.013	-.012	-.014	-.013	.817
.834							-.012			.834
.870							-.010			.870
.888							-.009			.888
.921	-.126									.921
.924	-.002	-.018		-.020			-.008			.924
.947							-.009			.947
.964							-.006			.964
.981	.001	-.014	-.013		-.010	-.007	-.009	-.010	-.008	.981
.984					-.014				-.015	.984
.998							-.019			.998
1.000	-.130									1.000

Nose rake			Base rake		
Orifice station, y, in.	Cp top	Cp side	Orifice station, y, in.	Cp top	Cp side
.010	.793		.031	.407	.299
.030	1.449		.094	.770	.518
.050	1.566		.156	.983	.694
.070	1.514		.219	1.158	.843
.090	1.389		.281	1.293	.962
.110	1.389		.344	1.353	1.078
.130	1.397		.406	1.387	1.183
.150	1.397		.469	1.414	1.248
.170	1.397		.750	1.501	
.190	1.340		1.000	1.541	
			1.250	1.570	
			1.500	1.588	

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TABLE 22. - PRESSURE COEFFICIENTS FOR AN INTERCONTINENTAL BALLISTIC MISSILE FOR NOSE V WITH NATURAL TRANSITION AT M = 2.29 - Continued

(d) $\alpha = 0^{\circ}$

Model station, $\frac{x}{l}$	Cp for meridian angle, θ, deg – 0	90	105	120	150	165	180	225	270	Model station, $\frac{x}{l}$
.059							1.681			.059
.060							1.659			.060
.061							1.607			.061
.063							1.516			.063
.064							1.401			.064
.075	-.145	-.143	-.143	-.143	-.142	-.143	-.143	-.143	-.144	.075
.085	-.000	.004	.005	.007	.004	.005	.009	.003	-.002	.085
.096	.076		.071	.073	.077	.071	.075	.066	.048	.096
.119	.125	.112	.112	.114	.115	.114	.114	.111	.109	.119
.143							-.075			.143
.154	-.068	-.067	-.067	-.067	-.068		-.065	-.069	-.069	.154
.171							-.059			.171
.189							-.053			.189
.206	-.048	-.047	-.047	-.048	-.047	-.047	-.049	-.047	-.046	.206
.223							-.044			.223
.241							-.042			.241
.258	-.039	-.037	-.037	-.037	-.036	-.037	-.039	-.036	-.033	.258
.275							-.037			.275
.293							-.037			.293
.310	-.031	-.033	-.033	-.032	-.032	-.032	-.033	-.028	-.028	.310
.327							-.030			.327
.344							-.029			.344
.362	-.025	-.029	-.027	-.028	-.029	-.028	-.029	-.023	-.024	.362
.379							-.027			.379
.396	-.024	-.026	-.027	-.026	-.026	-.024	-.026	-.022	-.021	.396
.408							-.023			.408
.426	.082	.078	.083	.080	.081	.083	.082	.083	.082	.426
.451	.075	.074	.074	.075	.079	.076	.077	.077	.076	.451
.476	.070	.068	.067	.069	.071	.071	.071	.072	.071	.476
.501	.066		.065	.064	.065	.064	.065		.065	.501
.530	-.040	-.038	-.038	-.038	-.039		-.041	-.037	-.037	.530
.548							-.037			.548
.566							-.030			.566
.584	-.029	-.029	-.029	-.032	-.031	-.030	-.028	-.029	-.027	.584
.602							-.025			.602
.620							-.023			.620
.638	-.024	-.027		-.022	-.022		-.021		-.024	.638
.655							-.020			.655
.673							-.018			.673
.691	-.021	-.023	-.022		-.022	-.019		-.018	-.019	.691
.709							-.016			.709
.727							-.017			.727
.745	-.017	-.016		-.016	-.019		-.017		-.014	.745
.763							-.017			.763
.781							-.018			.781
.799							-.016			.799
.817	-.013	-.016	-.016	-.016	-.016	-.016	-.013	-.011	-.008	.817
.834							-.013			.834
.870							-.010			.870
.888							-.008			.888
.921	-.117									.921
.924	-.008	-.012		-.017			-.007			.924
.947							-.008			.947
.964							-.006			.964
.981	.006	-.007	-.010		-.008	-.008	-.009	-.006	-.004	.981
.984					-.012				-.010	.984
.998							-.013			.998
1.000	-.121									1.000

Nose rake			Base rake		
Orifice station, y, in.	Cp top	Cp side	Orifice station, y, in.	Cp top	Cp side
.010	.723		.031	.297	.298
.030	1.442		.094	.478	.469
.050	1.555		.156	.606	.600
.070	1.427		.219	.722	.725
.090	1.337		.281	.802	.827
.110	1.322		.344	.895	.935
.130	1.319		.406	.987	1.030
.150	1.319		.469	1.065	1.117
.170	1.301		.750	1.243	
.190	1.252		1.000	1.312	
			1.250	1.379	
			1.500	1.437	

[redacted]

TABLE 22. - PRESSURE COEFFICIENTS FOR AN INTERCONTINENTAL BALLISTIC MISSILE FOR NOSE V WITH NATURAL TRANSITION AT M = 2.29 - Continued

(e) $\alpha = 3.0^{\circ}$

Model station, $\frac{x}{l}$	Cp for meridian angle, θ, deg – 0	90	105	120	150	165	180	225	270	Model station, $\frac{x}{l}$
.059							1.678			.059
.060							1.676			.060
.061							1.635			.061
.063							1.563			.063
.064							1.444			.064
.075	-.145	-.141	-.140	-.137	-.133	-.133	-.134	-.138	-.143	.075
.085	-.068	.006	.023	.044	.066	.074	.083	.054	-.001	.085
.096	.018		.093	.110	.139	.140	.146	.118	.051	.096
.119	.071	.114	.126	.142	.163	.167	.169	.150	.111	.119
.143							-.047			.143
.154	-.090	-.068	-.061	-.053	-.043		-.036	-.050	-.069	.154
.171							-.032			.171
.189							-.030			.189
.206	-.062	-.051	-.045	-.041	-.029	-.027	-.027	-.035	-.049	.206
.223							-.024			.223
.241							-.024			.241
.258	-.045	-.045	-.040	-.035	-.024	-.023	-.024	-.030	-.039	.258
.275							-.024			.275
.293							-.024			.293
.310	-.033	-.041	-.039	-.033	-.025	-.022	-.020	-.027	-.036	.310
.327							-.020			.327
.344							-.020			.344
.362	-.025	-.038	-.036	-.033	-.024	-.020	-.020	-.023	-.033	.362
.379							-.020			.379
.396	-.021	-.034	-.035	-.033	-.023	-.020	-.016	-.024	-.030	.396
.408							-.018			.408
.426	.076	.067	.073	.075	.085	.091	.093	.083	.071	.426
.451	.070	.064	.068	.074	.086	.088	.090	.079	.067	.451
.476	.061	.061	.063	.070	.083	.087	.088	.079	.063	.476
.501	.053		.063	.067	.080	.083	.086		.059	.501
.530	-.043	-.043	-.040	-.039	-.031		-.030	-.032	-.041	.530
.548							-.028			.548
.566							-.022			.566
.584	-.032	-.037	-.034	-.033	-.026	-.022	-.020	-.026	-.033	.584
.602							-.017			.602
.620							-.017			.620
.638	-.024	-.034		-.024	-.018		-.014		-.030	.638
.655							-.013			.655
.673							-.012			.673
.691	-.020	-.031	-.029		-.019	-.014		-.018	-.027	.691
.709							-.012			.709
.727							-.013			.727
.745	-.017	-.024		-.023	-.017		-.012		-.021	.745
.763							-.012			.763
.781							-.015			.781
.799							-.014			.799
.817	-.011	-.024	-.025	-.022	-.016	-.011	-.008	-.014	-.016	.817
.834							-.010			.834
.870							-.006			.870
.888							-.006			.888
.921	-.123									.921
.924	-.009	-.020		-.022			-.003			.924
.947							-.005			.947
.964							-.001			.964
.981	.006	-.017	-.018		-.007	-.002	-.002	-.006	-.012	.981
.984					-.014				-.018	.984
.998							-.007			.998
1.000	-.128									1.000

Nose rake			Base rake		
Orifice station, y, in.	C_p top	C_p side	Orifice station, y, in.	C_p top	C_p side
.010	.562		.031	.237	.326
.030	1.286		.094	.370	.563
.050	1.434		.156	.460	.766
.070	1.344		.219	.545	.927
.090	1.252		.281	.606	1.043
.110	1.227		.344	.669	1.169
.130	1.214		.406	.714	1.255
.150	1.209		.469	.763	1.297
.170	1.209		.750	.930	
.190	1.190		1.000	1.094	
			1.250	1.195	
			1.500	1.217	

[redacted]

TABLE 22. - PRESSURE COEFFICIENTS FOR AN INTERCONTINENTAL BALLISTIC MISSILE FOR NOSE V WITH NATURAL TRANSITION AT M = 2.29 - Continued

(f) $\alpha = 6.3^{\circ}$

Model station, $\frac{x}{l}$	Cp for meridian angle, θ, deg – 0	90	105	120	150	165	180	225	270	Model station, $\frac{x}{l}$
.059							1.663			.059
.060							1.677			.060
.061							1.649			.061
.063							1.595			.063
.064							1.493			.064
.075	-.147	-.146	-.144	-.139	-.128	-.125	-.124	-.135	-.148	.075
.085	-.137	.010	.049	.096	.145	.163	.175	.117	.001	.085
.096	-.042		.118	.152	.208	.216	.226	.176	.060	.096
.119	.014	.113	.140	.170	.216	.228	.232	.193	.111	.119
.143							-.013			.143
.154	-.111	-.071	-.056	-.040	-.013		.002	-.028	-.073	.154
.171							.002			.171
.189							.002			.189
.206	-.072	-.062	-.049	-.035	-.006	.000	.002	-.019	-.062	.206
.223							.003			.223
.241							.002			.241
.258	-.045	-.063	-.051	-.035	-.007	.000	.000	-.022	-.059	.258
.275							.000			.275
.293							-.001			.293
.310	-.032	-.069	-.058	-.041	-.013	-.003	.000	-.023	-.065	.310
.327							.000			.327
.344							-.000			.344
.362	-.023	-.072	-.062	-.046	-.015	-.005	-.001	-.025	-.066	.362
.379							-.002			.379
.396	-.021	-.069	-.064	-.049	-.017	-.006	-.000	-.029	-.063	.396
.408							-.004			.408
.426	.075	.026	.035	.050	.095	.113	.117	.077	.030	.426
.451	.067	.031	.035	.053	.100	.110	.119	.077	.034	.451
.476	.054	.033	.037	.054	.098	.113	.117	.079	.037	.476
.501	.044		.042	.055	.095	.106	.112		.035	.501
.530	-.055	-.062	-.057	-.050	-.027		-.012	-.037	-.060	.530
.548							-.006			.548
.566							-.001			.566
.584	-.038	-.061	-.053	-.042	-.016	-.008	-.003	-.025	-.058	.584
.602							-.001			.602
.620							-.002			.620
.638	-.026	-.057		-.036	-.012		.000		-.054	.638
.655							.003			.655
.673							-.000			.673
.691	-.022	-.057	-.051		-.018	-.008		-.022	-.054	.691
.709							-.000			.709
.727							.000			.727
.745	-.018	-.054		-.041	-.013		.000		-.051	.745
.763							.000			.763
.781							-.002			.781
.799							-.001			.799
.817	-.012	-.052	-.051	-.040	-.012	-.000	.004	-.022	-.044	.817
.834							.002			.834
.870							.005			.870
.888							.004			.888
.921	-.146									.921
.924	-.012	-.045		-.044			.010			.924
.947							.004			.947
.964							.007			.964
.981	.000	-.038	-.043		-.009	.000	.003	-.015	-.036	.981
.984					-.008				-.043	.984
.998							.002			.998
1.000	-.150									1.000

Nose rake			Base rake		
Orifice station, y, in.	Cp top	Cp side	Orifice station, y, in.	Cp top	Cp side
.010	.434		.031	.419	.347
.030	1.034		.094	.829	.797
.050	1.214		.156	.947	1.123
.070	1.172		.219	.989	1.284
.090	1.123		.281	1.023	1.403
.110	1.094		.344	1.043	1.437
.130	1.075		.406	1.056	1.463
.150	1.062		.469	1.068	1.478
.170	1.039		.750	1.102	
.190	.983		1.000	1.128	
			1.250	1.140	
			1.500	1.153	

[redacted]

[redacted]

TABLE 22. - PRESSURE COEFFICIENTS FOR AN INTERCONTINENTAL BALLISTIC MISSILE FOR NOSE V WITH NATURAL TRANSITION AT M = 2.29 - Concluded

(g) $\alpha = 10.1^{\circ}$

Model station, $\frac{x}{l}$	Cp for meridian angle, θ, deg –									Model station, $\frac{x}{l}$
	0	90	105	120	150	165	180	225	270	
.059							1.635			.059
.060							1.673			.060
.061							1.674			.061
.063							1.629			.063
.064							1.543			.064
.075	-.168	-.158	-.151	-.128	-.108	-.083	-.073	-.118	-.163	.075
.085	-.160	.026	.084	.159	.249	.277	.295	.205	.014	.085
.096	-.108		.148	.202	.291	.308	.322	.246	.077	.096
.119	-.047	.112	.153	.203	.284	.306	.314	.245	.110	.119
.143							.034			.143
.154	-.130	-.076	-.050	-.022	.025		.051	.001	-.076	.154
.171							.050			.171
.189							.049			.189
.206	-.073	-.079	-.054	-.026	.026	.041	.048	.002	-.077	.206
.223							.048			.223
.241							.044			.241
.258	-.043	-.093	-.067	-.034	.022	.038	.042	-.004	-.087	.258
.275							.040			.275
.293							.038			.293
.310	-.029	-.108	-.080	-.045	.013	.033	.041	-.009	-.104	.310
.327							.039			.327
.344							.038			.344
.362	-.020	-.122	-.091	-.054	.007	.030	.038	-.015	-.117	.362
.379							.035			.379
.396	-.016	-.128	-.097	-.060	.007	.028	.038	-.020	-.124	.396
.408							.034			.408
.426	.085	-.069	-.016	.030	.127	.162	.173	.091	-.063	.426
.451	.084	-.062	-.018	.034	.135	.160	.175	.093	-.059	.451
.476	.056	-.054	-.018	.034	.134	.163	.175	.094	-.055	.476
.501	.043		-.014	.034	.133	.161	.175		-.046	.501
.530	-.055	-.111	-.101	-.067	.002		.029	-.027	-.111	.530
.548							.031			.548
.566							.033			.566
.584	-.044	-.102	-.100	-.065	.001	.021	.031	-.025	-.100	.584
.602							.031			.602
.620							.028			.620
.638	-.033	-.099		-.064	.000		.028		-.098	.638
.655							.025			.655
.673							.028			.673
.691	-.033	-.104	-.101		-.004	.020		-.029	-.102	.691
.709							.032			.709
.727							.034			.727
.745	-.032	-.102		-.072	.000		.032		-.100	.745
.763							.033			.763
.781							.028			.781
.799							.024			.799
.817	-.032	-.105	-.095	-.068	-.004	.020	.031	-.031	-.100	.817
.834							.027			.834
.870							.030			.870
.888							.028			.888
.921	-.165									.921
.924	-.033	-.072		-.072			.031			.924
.947							.028			.947
.964							.032			.964
.981	-.019	-.060	-.103		-.001	.019	.027	-.023	-.069	.981
.984					-.006				-.082	.984
.998							.027			.998
1.000	-.169									1.000

Nose rake			Base rake		
Orifice station, y, in.	C_p top	C_p side	Orifice station, y, in.	C_p top	C_p side
.010	.221		.031	.501	.237
.030	.777		.094	1.068	.792
.050	.924		.156	1.005	1.334
.070	.902		.219	1.026	1.390
.090	.902		.281	1.031	1.433
.110	.885		.344	1.037	1.449
.130	.869		.406	1.043	1.460
.150	.856		.469	1.046	1.465
.170	.843		.750	1.053	
.190	.803		1.000	1.078	
			1.250	1.108	
			1.500	1.142	

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TABLE 23. - PRESSURE COEFFICIENTS FOR AN INTERCONTINENTAL BALLISTIC MISSILE FOR NOSE V WITH NATURAL TRANSITION AT M = 2.98

(a) $\alpha = -10.1^{\circ}$

Model station, $\frac{x}{l}$	Cp for meridian angle, θ, deg –									Model station, $\frac{x}{l}$
	0	90	105	120	150	165	180	225	270	
.059							1.711			.059
.060							1.631			.060
.061							1.538			.061
.063							1.414			.063
.064							1.281			.064
.075	.006	-.057	-.062	-.076	-.075	-.075	-.075	-.076	-.056	.075
.085	.291	.079	.031	-.007	-.043	-.053	-.057	-.033	.079	.085
.096	.317		.077	.038	-.012	-.030	-.031	.009	.113	.096
.119	.305	.120	.088	.060	.017	.005	-.001	.036	.121	.119
.143							-.077			.143
.154	.066	-.027	-.044	-.057	-.071		-.072	-.066	-.029	.154
.171							-.067			.171
.189							-.057			.189
.206	.056	-.035	-.049	-.059	-.059	-.050	-.049	-.062	-.035	.206
.223							-.042			.223
.241							-.035			.241
.258	.047	-.048	-.060	-.068	-.044	-.032	-.030	-.061	-.043	.258
.275							-.026			.275
.293							-.023			.293
.310	.044	-.058	-.072	-.074	-.038	-.027	-.021	-.051	-.059	.310
.327							-.020			.327
.344							-.019			.344
.362	.042	-.067	-.082	-.065	-.037	-.026	-.018	-.044	-.068	.362
.379							-.017			.379
.396	.038	-.073	-.086	-.057	-.040	-.026	-.016	-.045	-.072	.396
.408							-.017			.408
.426	.145	-.034	-.025	-.013	-.005	.027	.048	-.007	-.033	.426
.451	.158	-.029	-.035	-.004	-.001	.023	.053	-.002	-.026	.451
.476	.164	-.026	-.033	-.001	-.012	.019	.038	-.002	-.023	.476
.501	.168		-.031	-.000	-.017	.014	.026		-.020	.501
.530	.047	-.074	-.074	-.046	-.062		-.037	-.038	-.072	.530
.548							-.036			.548
.566							-.037			.566
.584	.046	-.079	-.068	-.050	-.060	-.039	-.033	-.043	-.076	.584
.602							-.026			.602
.620							-.026			.620
.638	.043	-.081		-.049	-.047		-.025		-.079	.638
.655							-.024			.655
.673							-.024			.673
.691	.042	-.084	-.064		-.041	-.034		-.047	-.083	.691
.709							-.024			.709
.727							-.023			.727
.745	.043	-.076		-.043	-.042		-.024		-.085	.745
.763							-.025			.763
.781							-.028			.781
.799							-.029			.799
.817	.042	-.080	-.046	-.041	-.045	-.037	-.027	-.040	-.083	.817
.834							-.028			.834
.870							-.026			.870
.888							-.026			.888
.921	-.114									.921
.924	.040	-.054		-.041			-.026			.924
.947							-.027			.947
.964							-.025			.964
.981	.057	-.044	-.035		-.048	-.045	-.026	-.044	-.044	.981
.984					-.048				-.056	.984
.998							-.026			.998
1.000	-.115									1.000

Nose rake			Base rake		
Orifice station, y, in.	Cp top	Cp side	Orifice station, y, in.	Cp top	Cp side
.010	1.020		.031	.733	.114
.030	1.470		.094	1.672	.381
.050	1.578		.156	1.891	.894
.070	1.590		.219	1.938	1.152
.090	1.534		.281	1.951	1.318
.110	1.525		.344	1.956	1.373
.130	1.541		.406	1.940	1.446
.150	1.549		.469	1.941	1.482
.170	1.555		.750	1.943	
.190	1.509		1.000	1.924	
			1.250	1.927	
			1.500	1.922	

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TABLE 23. - PRESSURE COEFFICIENTS FOR AN INTERCONTINENTAL BALLISTIC MISSILE FOR NOSE V WITH NATURAL TRANSITION AT M = 2.98 - Continued

(b) α = -6.3°

Model station, $\frac{x}{l}$	Cp for meridian angle, θ, deg – 0	90	105	120	150	165	180	225	270	Model station, $\frac{x}{l}$
.059							1.729			.059
.060							1.676			.060
.061							1.608			.061
.063							1.486			.063
.064							1.359			.064
.075	-.025	-.053	-.055	-.059	-.062	-.061	-.061	-.060	-.051	.075
.085	.197	.070	.039	.019	-.017	-.021	-.023	-.001	.071	.085
.096	.232		.083	.058	.021	.012	.012	.038	.105	.096
.119	.231	.120	.099	.080	.050	.043	.039	.064	.121	.119
.143							-.063			.143
.154	.024	-.028	-.037	-.046	-.057		-.059	-.052	-.028	.154
.171							-.055			.171
.189							-.049			.189
.206	.019	-.028	-.036	-.042	-.045	-.043	-.045	-.044	-.027	.206
.223							-.040			.223
.241							-.036			.241
.258	.012	-.033	-.039	-.041	-.036	-.031	-.032	-.039	-.028	.258
.275							-.027			.275
.293							-.025			.293
.310	.009	-.038	-.042	-.040	-.028	-.024	-.024	-.034	-.038	.310
.327							-.022			.327
.344							-.021			.344
.362	.008	-.042	-.043	-.038	-.024	-.020	-.019	-.029	-.041	.362
.379							-.019			.379
.396	.006	-.044	-.043	-.036	-.022	-.017	-.016	-.026	-.043	.396
.408							-.016			.408
.426	.091	.010	.022	.025	.033	.040	.044	.030	.013	.426
.451	.097	.015	.018	.025	.038	.039	.044	.031	.018	.451
.476	.102	.019	.018	.021	.030	.033	.036	.028	.022	.476
.501	.106		.018	.020	.024	.027	.030		.025	.501
.530	.012	-.039	-.041	-.038	-.030		-.031	-.032	-.037	.530
.548							-.031			.548
.566							-.028			.566
.584	.011	-.041	-.041	-.033	-.028	-.027	-.026	-.027	-.037	.584
.602							-.021			.602
.620							-.019			.620
.638	.010	-.041		-.030	-.022		-.016		-.039	.638
.655							-.014			.655
.673							-.012			.673
.691	.008	-.041	-.038		-.020	-.017		-.024	-.041	.691
.709							-.012			.709
.727							-.012			.727
.745	.008	-.036		-.023	-.017		-.011		-.042	.745
.763							-.010			.763
.781							-.012			.781
.799							-.010			.799
.817	.010	-.037	-.028	-.019	-.015	-.014	-.008	-.018	-.041	.817
.834							-.010			.834
.870							-.008			.870
.888							-.008			.888
.921	-.105									.921
.924	.012	-.033		-.019			-.009			.924
.947							-.010			.947
.964							-.007			.964
.981	.023	-.032	-.022		-.015	-.014	-.008	-.016	-.033	.981
.984					-.017				-.038	.984
.998							-.008			.998
1.000	-.105									1.000

Nose rake			Base rake		
Orifice station, y, in.	C_p top	C_p side	Orifice station, y, in.	C_p top	C_p side
.010	.890		.031	.520	.243
.030	1.518		.094	1.165	.639
.050	1.604		.156	1.424	.877
.070	1.536		.219	1.628	1.079
.090	1.437		.281	1.667	1.242
.110	1.448		.344	1.687	1.307
.130	1.465		.406	1.699	1.381
.150	1.463		.469	1.712	1.392
.170	1.469		.750	1.728	
.190	1.424		1.000	1.750	
			1.250	1.768	
			1.500	1.761	

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TABLE 23. - PRESSURE COEFFICIENTS FOR AN INTERCONTINENTAL BALLISTIC MISSILE FOR NOSE V WITH NATURAL TRANSITION AT M = 2.98 - Continued

(c) $\alpha = -3.0^{\circ}$

Model station, $\frac{x}{l}$	Cp for meridian angle, θ, deg –									Model station, $\frac{x}{l}$
	0	90	105	120	150	165	180	225	270	
.059							1.746			.059
.060							1.705			.060
.061							1.639			.061
.063							1.538			.063
.064							1.414			.064
.075	-.038	-.048	-.051	-.052	-.054	-.055	-.054	-.053	-.049	.075
.085	.124	.069	.056	.045	.025	.022	.022	.036	.071	.085
.096	.177		.092	.081	.063	.059	.060	.071	.102	.096
.119	.176	.119	.108	.100	.085	.081	.081	.091	.120	.119
.143							-.046			.143
.154	-.004	-.027	-.030	-.034	-.041		-.043	-.040	-.027	.154
.171							-.041			.171
.189							-.037			.189
.206	-.004	-.022	-.027	-.029	-.032	-.034	-.035	-.031	-.022	.206
.223							-.032			.223
.241							-.031			.241
.258	-.006	-.022	-.026	-.027	-.027	-.027	-.028	-.027	-.018	.258
.275							-.025			.275
.293							-.025			.293
.310	-.007	-.022	-.025	-.025	-.025	-.023	-.023	-.023	-.022	.310
.327							-.022			.327
.344							-.021			.344
.362	-.008	-.022	-.022	-.021	-.021	-.020	-.020	-.021	-.022	.362
.379							-.020			.379
.396	-.009	-.022	-.022	-.021	-.018	-.017	-.017	-.019	-.020	.396
.408							-.017			.408
.426	.066	.041	.049	.042	.046	.047	.047	.044	.044	.426
.451	.068	.045	.044	.043	.049	.047	.048	.046	.046	.451
.476	.069	.042	.041	.039	.042	.041	.041	.041	.046	.476
.501	.071		.039	.037	.038	.037	.037		.045	.501
.530	-.006	-.024	-.025	-.026	-.025		-.025	-.024	-.021	.530
.548							-.024			.548
.566							-.021			.566
.584	-.004	-.021	-.021	-.021	-.020	-.019	-.019	-.018	-.017	.584
.602							-.016			.602
.620							-.014			.620
.638	-.005	-.019		-.017	-.014		-.012		-.017	.638
.655							-.011			.655
.673							-.010			.673
.691	-.005	-.018	-.017		-.012	-.011		-.015	-.017	.691
.709							-.010			.709
.727							-.009			.727
.745	-.004	-.011		-.013	-.010		-.009		-.016	.745
.763							-.009			.763
.781							-.009			.781
.799							-.009			.799
.817	-.003	-.012	-.012	-.009	-.008	-.008	-.006	-.011	-.013	.817
.834							-.006			.834
.870							-.005			.870
.888							-.004			.888
.921	-.090									.921
.924	-.001	-.009		-.009			-.005			.924
.947							-.007			.947
.964							-.005			.964
.981	.007	-.008	-.009		-.006	-.005	-.005	-.008	-.010	.981
.984					-.007				-.014	.984
.998							-.010			.998
1.000	-.092									1.000

Nose rake			Base rake		
Orifice station, y, in.	Cp top	Cp side	Orifice station, y, in.	Cp top	Cp side
.010	.783		.031	.325	.225
.030	1.505		.094	.650	.412
.050	1.581		.156	.824	.548
.070	1.477		.219	1.025	.668
.090	1.393		.281	1.162	.777
.110	1.393		.344	1.266	.888
.130	1.388		.406	1.317	.993
.150	1.386		.469	1.365	1.059
.170	1.375		.750	1.505	
.190	1.326		1.000	1.566	
			1.250	1.608	
			1.500	1.636	

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TABLE 23. - PRESSURE COEFFICIENTS FOR AN INTERCONTINENTAL BALLISTIC MISSILE FOR NOSE V WITH NATURAL TRANSITION AT M = 2.98 - Continued

(d) $\alpha = 0^{\circ}$

Model station, $\frac{x}{l}$	Cp for meridian angle, θ, deg –									Model station, $\frac{x}{l}$
	0	90	105	120	150	165	180	225	270	
.059							1.754			.059
.060							1.725			.060
.061							1.674			.061
.063							1.588			.063
.064							1.476			.064
.075	-.047	-.047	-.047	-.047	-.046	-.047	-.047	-.047	-.047	.075
.085	.068	.069	.068	.071	.069	.070	.071	.072	.069	.085
.096	.129		.105	.105	.107	.106	.110	.106	.100	.096
.119	.129	.119	.118	.120	.121	.121	.122	.121	.120	.119
.143							-.028			.143
.154	-.026	-.026	-.026	-.026	-.026		-.025	-.026	-.026	.154
.171							-.025			.171
.189							-.023			.189
.206	-.021	-.021	-.021	-.021	-.021	-.021	-.022	-.020	-.020	.206
.223							-.021			.223
.241							-.021			.241
.258	-.020	-.020	-.018	-.019	-.019	-.020	-.021	-.019	-.014	.258
.275							-.021			.275
.293							-.021			.293
.310	-.018	-.018	-.018	-.019	-.019	-.020	-.021	-.017	-.018	.310
.327							-.018			.327
.344							-.018			.344
.362	-.016	-.018	-.015	-.017	-.018	-.019	-.019	-.016	-.016	.362
.379							-.017			.379
.396	-.016	-.016	-.016	-.016	-.017	-.018	-.015	-.016	-.014	.396
.408							-.015			.408
.426	.054	.050	.057	.052	.051	.054	.053	.053	.052	.426
.451	.053	.051	.051	.052	.056	.053	.052	.054	.054	.451
.476	.051	.048	.048	.049	.051	.050	.051	.052	.051	.476
.501	.049		.047	.045	.049	.049	.049		.049	.501
.530	-.017	-.020	-.021	-.020	-.019		-.018	-.017	-.018	.530
.548							-.016			.548
.566							-.013			.566
.584	-.014	-.016	-.014	-.014	-.015	-.016	-.013	-.012	-.012	.584
.602							-.012			.602
.620							-.012			.620
.638	-.012	-.012		-.012	-.013		-.011		-.010	.638
.655							-.010			.655
.673							-.011			.673
.691	-.012	-.012	-.011		-.013	-.012		-.011	-.012	.691
.709							-.011			.709
.727							-.010			.727
.745	-.010	-.005		-.010	-.010		-.009		-.010	.745
.763							-.008			.763
.781							-.009			.781
.799							-.008			.799
.817	-.007	-.007	-.007	-.006	-.008	-.008	-.007	-.008	-.007	.817
.834							-.008			.834
.870							-.008			.870
.888							-.007			.888
.921	-.082									.921
.924	-.005	-.005		-.007			-.003			.924
.947							-.004			.947
.964							-.002			.964
.981	.002	-.004	-.004		-.004	-.003	-.003	-.003	-.005	.981
.984					-.007				-.009	.984
.998							-.007			.998
1.000	-.083									1.000

Nose rake			Base rake		
Orifice station, y, in.	Cp top	Cp side	Orifice station, y, in.	Cp top	Cp side
.010	.652		.031	.231	.220
.030	1.328		.094	.403	.359
.050	1.441		.156	.506	.468
.070	1.384		.219	.578	.556
.090	1.339		.281	.647	.639
.110	1.327		.344	.719	.731
.130	1.320		.406	.788	.816
.150	1.317		.469	.865	.895
.170	1.285		.750	1.056	
.190	1.250		1.000	1.137	
			1.250	1.242	
			1.500	1.341	

[redacted]

TABLE 23. - PRESSURE COEFFICIENTS FOR AN INTERCONTINENTAL BALLISTIC MISSILE FOR NOSE V WITH NATURAL TRANSITION AT M = 2.98 - Continued

(e) $\alpha = 3.0^{\circ}$

Model station, $\frac{x}{l}$	Cp for meridian angle, θ, deg –									Model station, $\frac{x}{l}$
	0	90	105	120	150	165	180	225	270	
.059							1.739			.059
.060							1.743			.060
.061							1.710			.061
.063							1.639			.063
.064							1.523			.064
.075	-.055	-.048	-.045	-.042	-.037	-.036	-.035	-.040	-.047	.075
.085	.022	.070	.082	.099	.118	.125	.129	.112	.069	.085
.096	.071		.118	.132	.154	.158	.165	.144	.101	.096
.119	.084	.119	.129	.140	.157	.162	.164	.150	.119	.119
.143							-.008			.143
.154	-.043	-.027	-.022	-.018	-.010		-.002	-.012	-.027	.154
.171							-.003			.171
.189							-.002			.189
.206	-.034	-.024	-.020	-.015	-.006	-.004	-.003	-.010	-.022	.206
.223							-.003			.223
.241							-.004			.241
.258	-.028	-.023	-.020	-.016	-.009	-.007	-.006	-.012	-.018	.258
.275							-.007			.275
.293							-.007			.293
.310	-.024	-.024	-.022	-.018	-.013	-.010	-.008	-.013	-.024	.310
.327							-.008			.327
.344							-.008			.344
.362	-.020	-.024	-.022	-.018	-.013	-.010	-.009	-.013	-.022	.362
.379							-.009			.379
.396	-.018	-.024	-.022	-.020	-.013	-.010	-.009	-.014	-.021	.396
.408							-.009			.408
.426	.047	.041	.051	.049	.059	.063	.065	.056	.043	.426
.451	.046	.042	.045	.051	.066	.063	.066	.058	.045	.451
.476	.041	.041	.044	.050	.063	.066	.068	.061	.044	.476
.501	.038		.045	.050	.064	.068	.071		.045	.501
.530	-.024	-.025	-.024	-.019	-.010		-.005	-.011	-.022	.530
.548							-.005			.548
.566							-.004			.566
.584	-.020	-.022	-.020	-.017	-.011	-.008	-.006	-.010	-.018	.584
.602							-.006			.602
.620							-.007			.620
.638	-.014	-.021		-.016	-.011		-.005		-.018	.638
.655							-.006			.655
.673							-.006			.673
.691	-.012	-.020	-.019		-.011	-.008		-.011	-.019	.691
.709							-.006			.709
.727							-.004			.727
.745	-.010	-.012		-.015	-.008		-.004		-.017	.745
.763							-.005			.763
.781							-.008			.781
.799							-.008			.799
.817	-.007	-.014	-.014	-.014	-.009	-.008	-.005	-.011	-.014	.817
.834							-.005			.834
.870							-.001			.870
.888							-.000			.888
.921	-.089									.921
.924	-.006	-.012		-.012			-.000			.924
.947							-.000			.947
.964							.000			.964
.981	.001	-.010	-.011		-.002	-.001	-.001	-.005	-.010	.981
.984					-.005				-.016	.984
.998							-.003			.998
1.000	-.091									1.000

Nose rake			Base rake		
Orifice station, y, in.	Cp top	Cp side	Orifice station, y, in.	Cp top	Cp side
.010	.496		.031	.192	.224
.030	1.162		.094	.302	.430
.050	1.294		.156	.383	.588
.070	1.247		.219	.454	.702
.090	1.216		.281	.496	.816
.110	1.216		.344	.539	.933
.130	1.214		.406	.564	1.027
.150	1.201		.469	.603	1.096
.170	1.186		.750	.744	
.190	1.154		1.000	.896	
			1.250	.992	
			1.500	1.025	

[redacted]

TABLE 23. - PRESSURE COEFFICIENTS FOR AN INTERCONTINENTAL BALLISTIC MISSILE FOR NOSE V WITH NATURAL TRANSITION AT M = 2.98 - Continued

(f) $\alpha = 6.3^{\circ}$

Model station, $\frac{x}{l}$	Cp for meridian angle, θ, deg –									Model station, $\frac{x}{l}$
	0	90	105	120	150	165	180	225	270	
.059							1.739			.059
.060							1.750			.060
.061							1.732			.061
.063							1.678			.063
.064							1.572			.064
.075	-.054	-.048	-.044	-.037	-.026	-.022	-.021	-.031	-.050	.075
.085	-.025	.071	.098	.136	.180	.195	.204	.162	.071	.085
.096	.013		.140	.167	.213	.220	.230	.190	.103	.096
.119	.038	.120	.140	.164	.200	.212	.215	.185	.121	.119
.143							.021			.143
.154	-.059	-.029	-.017	-.005	.015		.026	.005	-.028	.154
.171							.025			.171
.189							.023			.189
.206	-.043	-.029	-.019	-.007	.012	.018	.020	.004	-.027	.206
.223							.019			.223
.241							.016			.241
.258	-.031	-.034	-.026	-.014	.006	.012	.013	-.002	-.028	.258
.275							.012			.275
.293							.010			.293
.310	-.022	-.039	-.031	-.020	.000	.007	.011	-.006	-.038	.310
.327							.010			.327
.344							.009			.344
.362	-.017	-.045	-.036	-.023	-.002	.006	.009	-.009	-.042	.362
.379							.008			.379
.396	-.015	-.046	-.039	-.026	-.002	.005	.009	-.012	-.044	.396
.408							.008			.408
.426	.043	.007	.027	.039	.075	.089	.094	.062	.011	.426
.451	.043	.013	.023	.043	.087	.095	.101	.068	.016	.451
.476	.036	.016	.025	.046	.088	.101	.107	.074	.020	.476
.501	.030		.029	.047	.090	.103	.109		.024	.501
.530	-.030	-.041	-.035	-.024	.002		.015	-.006	-.038	.530
.548							.013			.548
.566							.013			.566
.584	-.025	-.042	-.036	-.026	-.002	.006	.011	-.009	-.040	.584
.602							.011			.602
.620							.010			.620
.638	-.016	-.043		-.025	-.002		.011		-.041	.638
.655							.011			.655
.673							.010			.673
.691	-.013	-.045	-.038		-.004	.004		-.010	-.043	.691
.709							.006			.709
.727							.006			.727
.745	-.011	-.038		-.028	-.004		.007		-.043	.745
.763							.010			.763
.781							.009			.781
.799							.010			.799
.817	-.009	-.041	-.038	-.027	.000	.010	.013	-.011	-.042	.817
.834							.012			.834
.870							.014			.870
.888							.011			.888
.921	-.104									.921
.924	-.009	-.034		-.028			.012			.924
.947							.011			.947
.964							.013			.964
.981	-.001	-.033	-.036		.001	.010	.012	-.011	-.034	.981
.984					-.001				-.039	.984
.998							.012			.998
1.000	-.105									1.000

Nose rake			Base rake		
Orifice station, y, in.	Cp top	Cp side	Orifice station, y, in.	Cp top	Cp side
.010	.325		.031	.328	.232
.030	.886		.094	.671	.654
.050	1.061		.156	.749	.909
.070	1.059		.219	.795	1.106
.090	1.057		.281	.812	1.268
.110	1.047		.344	.827	1.350
.130	1.049		.406	.845	1.379
.150	1.041		.469	.859	1.396
.170	1.031		.750	.890	
.190	.997		1.000	.911	
			1.250	.929	
			1.500	.950	

[redacted]

TABLE 23. - PRESSURE COEFFICIENTS FOR AN INTERCONTINENTAL BALLISTIC MISSILE FOR NOSE V WITH NATURAL TRANSITION AT M = 2.98 - Concluded

(g) $\alpha = 10.1^{\circ}$

Model station, $\frac{x}{l}$	Cp for meridian angle, θ, deg –									Model station, $\frac{x}{l}$
	0	90	105	120	150	165	180	225	270	
.059							1.708			.059
.060							1.748			.060
.061							1.750			.061
.063							1.708			.063
.064							1.621			.064
.075	-.069	-.054	-.048	-.033	-.005	.014	.022	-.014	-.057	.075
.085	-.054	.078	.126	.187	.264	.289	.305	.229	.072	.085
.096	-.035		.163	.208	.281	.297	.308	.246	.111	.096
.119	-.006	.120	.153	.192	.259	.279	.288	.228	.119	.119
.143							.064			.143
.154	-.070	-.030	-.010	.012	.050		.071	.033	-.029	.154
.171							.067			.171
.189							.062			.189
.206	-.048	-.037	-.019	.001	.041	.053	.057	.023	-.036	.206
.223							.056			.223
.241							.052			.241
.258	-.030	-.050	-.032	-.009	.034	.047	.050	.013	-.042	.258
.275							.049			.275
.293							.046			.293
.310	-.020	-.061	-.041	-.017	.026	.041	.047	.008	-.059	.310
.327							.046			.327
.344							.045			.344
.362	-.017	-.071	-.049	-.023	.023	.039	.045	.004	-.069	.362
.379							.043			.379
.396	-.015	-.076	-.054	-.027	.022	.038	.045	.002	-.073	.396
.408							.043			.408
.426	.049	-.037	.005	.037	.114	.142	.151	.086	-.033	.426
.451	.055	-.032	.004	.047	.132	.153	.165	.097	-.027	.451
.476	.041	-.029	.007	.050	.133	.160	.170	.104	-.022	.476
.501	.030		.010	.052	.134	.160	.172		-.019	.501
.530	-.035	-.076	-.052	-.026	.025		.049	.007	-.073	.530
.548							.047			.548
.566							.049			.566
.584	-.033	-.081	-.056	-.029	.021	.038	.047	.004	-.077	.584
.602							.047			.602
.620							.045			.620
.638	-.027	-.083		-.029	.020		.046		-.080	.638
.655							.046			.655
.673							.045			.673
.691	-.025	-.086	-.061		.018	.036		.001	-.084	.691
.709							.045			.709
.727							.046			.727
.745	-.026	-.079		-.033	.020		.046		-.086	.745
.763							.045			.763
.781							.040			.781
.799							.040			.799
.817	-.028	-.077	-.063	-.034	.019	.038	.046	-.003	-.084	.817
.834							.041			.834
.870							.044			.870
.888							.041			.888
.921	-.115									.921
.924	-.028	-.050		-.040			.039			.924
.947							.037			.947
.964							.043			.964
.981	-.018	-.045	-.071		.018	.035	.043	-.007	-.047	.981
.984					.015				-.057	.984
.998							.042			.998
1.000	-.117									1.000

Nose rake			Base rake		
Orifice station, y, in.	C_p top	C_p side	Orifice station, y, in.	C_p top	C_p side
.010	.067		.031	.410	.103
.030	.614		.094	.890	.381
.050	.823		.156	.810	.924
.070	.858		.219	.823	1.146
.090	.858		.281	.827	1.311
.110	.865		.344	.831	1.357
.130	.869		.406	.824	1.373
.150	.860		.469	.824	1.382
.170	.858		.750	.823	
.190	.834		1.000	.837	
			1.250	.884	
			1.500	.923	

[redacted]

TABLE 24. - PRESSURE COEFFICIENTS FOR AN INTERCONTINENTAL BALLISTIC MISSILE FOR NOSE V WITH NATURAL TRANSITION AT M = 3.96

(a) $\alpha = -10.1^{\circ}$

Model station, $\frac{x}{l}$	Cp for meridian angle, θ, deg –									Model station, $\frac{x}{l}$
	0	90	105	120	150	165	180	225	270	
.059							1.728			.059
.060							1.652			.060
.061							1.572			.061
.063							1.429			.063
.064							1.321			.064
.075	.075	.013	.007	-.004	-.009	-.010	-.009	-.007	.014	.075
.085	.300	.114	.080	.051	.015	.008	.006	.028	.109	.085
.096	.310		.103	.072	.031	.020	.019	.042	.132	.096
.119	.274	.124	.101	.080	.046	.034	.029	.058	.123	.119
.143							-.031			.143
.154	.080	.0	-.010	-.018	-.028		-.029	-.024	.000	.154
.171							-.027			.171
.189							-.024			.189
.206	.062	-.007	-.018	-.024	-.026	-.023	-.021	-.025	-.008	.206
.223							-.018			.223
.241							-.015			.241
.258	.050	-.019	-.027	-.031	-.025	-.017	-.012	-.028	-.005	.258
.275							-.010			.275
.293							-.009			.293
.310	.044	-.027	-.033	-.035	-.024	-.012	-.009	-.029	-.027	.310
.327							-.008			.327
.344							-.008			.344
.362	.043	-.033	-.041	-.036	-.023	-.013	-.008	-.030	-.034	.362
.379							-.008			.379
.396	.041	-.037	-.039	-.036	-.024	-.015	-.008	-.032	-.037	.396
.408							-.008			.408
.426	.119	-.015	.004	-.017	-.003	.013	.023	-.016	-.017	.426
.451	.143	-.009	-.023	-.007	.016	.013	.028	-.010	-.010	.451
.476	.153	-.007	-.023	-.007	-.008	.010	.024	-.005	-.007	.476
.501	.160		-.023	-.008	-.011	.006	.017		-.004	.501
.530	.058	-.035	-.042	-.033	-.032		-.020	-.022	-.034	.530
.548							-.022			.548
.566							-.022			.566
.584	.049	-.039	-.039	-.040	-.030	-.026	-.023	-.028	-.039	.584
.602							-.020			.602
.620							-.019			.620
.638	.046	-.041		-.030	-.027		-.018		-.040	.638
.655							-.017			.655
.673							-.018			.673
.691	.046	-.043	-.040		-.030	-.025		-.037	-.042	.691
.709							-.019			.709
.727							-.018			.727
.745	.046	-.024		-.036	-.034		-.019		-.042	.745
.763							-.019			.763
.781							-.020			.781
.799							-.019			.799
.817	.046	-.042	-.034	-.033	-.037	-.027	-.019	-.032	-.042	.817
.834							-.021			.834
.870							-.021			.870
.888							-.022			.888
.921	-.059									.921
.924	.044	-.038		-.029			-.023			.924
.947							-.024			.947
.964							-.022			.964
.981	.056	-.034	-.028		-.035	-.033	-.022	-.031	-.039	.981
.984					-.036				-.040	.984
.998							-.023			.998
1.000	-.059									1.000

Nose rake			Base rake		
Orifice station, y, in.	Cp top	Cp side	Orifice station, y, in.	Cp top	Cp side
.010	.925		.031	.630	.029
.030	1.511		.094	1.567	.315
.050	1.627		.156	1.981	.639
.070	1.582		.219	2.153	.829
.090	1.525		.281	2.108	.946
.110	1.506		.344	2.121	1.015
.130	1.515		.406	2.150	1.050
.150	1.522		.469	2.135	1.080
.170	1.531		.750	2.141	
.190	1.495		1.000	2.162	
			1.250	2.173	
			1.500	2.166	

[redacted]

TABLE 24. - PRESSURE COEFFICIENTS FOR AN INTERCONTINENTAL BALLISTIC MISSILE FOR NOSE V WITH NATURAL TRANSITION AT M = 3.96 - Continued

(b) $\alpha = -6.3^{\circ}$

Model station, $\frac{x}{l}$	Cp for meridian angle, θ, deg –									Model station, $\frac{x}{l}$
	0	90	105	120	150	165	180	225	270	
.059							1.751			.059
.060							1.693			.060
.061							1.622			.061
.063							1.492			.063
.064							1.389			.064
.075	.044	.012	.007	.002	-.002	-.004	-.004	.000	.013	.075
.085	.219	.113	.089	.070	.041	.036	.034	.051	.110	.085
.096	.259		.111	.090	.063	.055	.052	.073	.128	.096
.119	.204	.123	.108	.093	.071	.065	.063	.081	.123	.119
.143							-.022			.143
.154	.041	.0	-.006	-.011	-.019		-.021	-.016	.000	.154
.171							-.021			.171
.189							-.021			.189
.206	.032	-.004	-.011	-.015	-.018	-.019	-.019	-.018	-.004	.206
.223							-.018			.223
.241							-.017			.241
.258	.022	-.010	-.015	-.018	-.016	-.014	-.016	-.016	.001	.258
.275							-.013			.275
.293							-.013			.293
.310	.017	-.016	-.019	-.020	-.015	-.012	-.013	-.016	-.016	.310
.327							-.013			.327
.344							-.012			.344
.362	.014	-.021	-.024	-.021	-.014	-.011	-.012	-.016	-.021	.362
.379							-.012			.379
.396	.013	-.025	-.027	-.022	-.013	-.010	-.013	-.016	-.023	.396
.408							-.009			.408
.426	.069	.004	.025	.008	.018	.020	.022	.014	.005	.426
.451	.077	.009	.008	.012	.037	.024	.027	.018	.009	.451
.476	.084	.011	.008	.010	.017	.020	.022	.016	.012	.476
.501	.089		.008	.009	.013	.015	.017		.013	.501
.530	.024	-.022	-.026	-.024	-.019		-.017	-.019	-.021	.530
.548							-.019			.548
.566							-.019			.566
.584	.017	-.027	-.028	-.024	-.021	-.021	-.019	-.019	-.024	.584
.602							-.017			.602
.620							-.015			.620
.638	.014	-.030		-.017	-.017		-.013		-.026	.638
.655							-.011			.655
.673							-.010			.673
.691	.013	-.032	-.030		-.015	-.015		-.018	-.028	.691
.709							-.009			.709
.727							-.009			.727
.745	.014	-.015		-.021	-.015		-.009		-.031	.745
.763							-.009			.763
.781							-.009			.781
.799							-.009			.799
.817	.014	-.034	-.025	-.019	-.014	-.012	-.007	-.015	-.032	.817
.834							-.008			.834
.870							-.007			.870
.888							-.007			.888
.921	-.059									.921
.924	.013	-.031		-.016			-.008			.924
.947							-.009			.947
.964							-.008			.964
.981	.019	-.026	-.017		-.017	-.014	-.008	-.014	-.029	.981
.984					-.016				-.032	.984
.998							-.010			.998
1.000	-.059									1.000

Nose rake			Base rake		
Orifice station, y, in.	C_p top	C_p side	Orifice station, y, in.	C_p top	C_p side
.010	.790		.031	.385	.085
.030	1.471		.094	.917	.335
.050	1.563		.156	1.223	.554
.070	1.510		.219	1.512	.709
.090	1.463		.281	1.622	.863
.110	1.440		.344	1.659	.997
.130	1.431		.406	1.697	1.082
.150	1.431		.469	1.731	1.116
.170	1.382		.750	1.774	
.190	1.378		1.000	1.800	
			1.250	1.818	
			1.500	1.834	

[redacted]

TABLE 24. - PRESSURE COEFFICIENTS FOR AN INTERCONTINENTAL BALLISTIC MISSILE FOR NOSE V WITH NATURAL TRANSITION AT M = 3.96 - Continued

(c) $\alpha = -3.0^{\circ}$

Model station, $\frac{x}{l}$	Cp for meridian angle, θ, deg –									Model station, $\frac{x}{l}$
	0	90	105	120	150	165	180	225	270	
.059							1.785			.059
.060							1.740			.060
.061							1.680			.061
.063							1.575			.063
.064							1.461			.064
.075	.024	.011	.008	.006	.004	.002	.003	.005	.011	.075
.085	.157	.111	.099	.091	.074	.070	.068	.081	.108	.085
.096	.211		.120	.111	.096	.098	.090	.101	.126	.096
.119	.158	.124	.117	.110	.099	.095	.094	.102	.123	.119
.143							-.011			.143
.154	.019	.001	-.001	-.005	-.008		-.008	-.006	.001	.154
.171							-.010			.171
.189							-.011			.189
.206	.013	-.002	-.005	-.007	-.009	-.011	-.011	-.008	-.001	.206
.223							-.011			.223
.241							-.010			.241
.258	.008	-.004	-.006	-.009	-.009	-.011	-.010	-.009	.006	.258
.275							-.010			.275
.293							-.010			.293
.310	.003	-.007	-.009	-.010	-.009	-.011	-.010	-.010	-.008	.310
.327							-.010			.327
.344							-.010			.344
.362	.000	-.010	-.012	-.012	-.009	-.011	-.010	-.010	-.009	.362
.379							-.010			.379
.396	-.000	-.012	-.013	-.012	-.009	-.011	-.009	-.010	-.011	.396
.408							-.009			.408
.426	.045	.025	.043	.024	.026	.025	.026	.027	.024	.426
.451	.048	.029	.027	.027	.046	.030	.030	.030	.028	.451
.476	.046	.027	.025	.024	.026	.025	.026	.027	.028	.476
.501	.051		.024	.023	.022	.023	.022		.028	.501
.530	.002	-.012	-.015	-.016	-.016		-.013	-.014	-.011	.530
.548							-.016			.548
.566							-.015			.566
.584	.001	-.012	-.014	-.014	-.016	-.016	-.013	-.012	-.010	.584
.602							-.013			.602
.620							-.011			.620
.638	-.000	-.012		-.008	-.012		-.009		-.009	.638
.655							-.007			.655
.673							-.006			.673
.691	-.001	-.014	-.013		-.010	-.010		-.009	-.010	.691
.709							-.004			.709
.727							-.005			.727
.745	-.001	-.0		-.011	-.010		-.004		-.010	.745
.763							-.005			.763
.781							-.006			.781
.799							-.005			.799
.817	-.001	-.013	-.012	-.010	-.009	-.007	-.005	-.007	-.010	.817
.834							-.005			.834
.870							-.004			.870
.888							-.004			.888
.921	-.055									.921
.924	-.001	-.011		-.008			-.004			.924
.947							-.004			.947
.964							-.004			.964
.981	.002	-.008	-.008		-.008	-.005	-.004	-.005	-.008	.981
.984					-.009				-.009	.984
.998							-.008			.998
1.000	-.057									1.000

Nose rake			Base rake		
Orifice station, y, in.	Cp top	Cp side	Orifice station, y, in.	Cp top	Cp side
.010	.691		.031	.221	.126
.030	1.326		.094	.434	.235
.050	1.456		.156	.571	.327
.070	1.438		.219	.729	.409
.090	1.405		.281	.844	.495
.110	1.391		.344	.955	.562
.130	1.380		.406	1.016	.644
.150	1.373		.469	1.090	.729
.170	1.351		.750	1.311	
.190	1.293		1.000	1.436	
			1.250	1.517	
			1.500	1.562	

[redacted]

TABLE 24. - PRESSURE COEFFICIENTS FOR AN INTERCONTINENTAL BALLISTIC MISSILE FOR NOSE V WITH NATURAL TRANSITION AT M = 3.96 - Continued

(d) $\alpha = 0^{\circ}$

Model station, $\frac{x}{l}$	Cp for meridian angle, θ, deg –									Model station, $\frac{x}{l}$
	0	90	105	120	150	165	180	225	270	
.059							1.765			.059
.060							1.774			.060
.061							1.702			.061
.063							1.624			.063
.064							1.508			.064
.075	.015	.015	.016	.016	.016	.016	.015	.015	.015	.075
.085	.111	.110	.109	.112	.111	.111	.111	.112	.110	.085
.096	.162		.129	.130	.131	.130	.131	.130	.127	.096
.119	.121	.124	.123	.124	.125	.125	.125	.124	.123	.119
.143							-.000			.143
.154	.002	.002	.001	.001	.002		-.000	.001	.002	.154
.171							-.000			.171
.189							-.001			.189
.206	-.000	-.0	-.001	-.001	-.001	-.001	-.001	-.000	-.001	.206
.223							-.001			.223
.241							-.002			.241
.258	-.002	-.002	-.002	-.002	-.002	-.002	-.002	-.002	.009	.258
.275							-.002			.275
.293							-.003			.293
.310	-.005	-.005	-.004	-.004	-.006	-.005	-.006	-.004	-.004	.310
.327							-.006			.327
.344							-.006			.344
.362	-.007	-.007	-.007	-.007	-.007	-.007	-.007	-.006	-.006	.362
.379							-.007			.379
.396	-.007	-.008	-.009	-.008	-.008	-.007	-.006	-.007	-.008	.396
.408							-.006			.408
.426	.030	.028	.047	.029	.030	.029	.030	.031	.029	.426
.451	.035	.032	.032	.033	.050	.033	.036	.035	.034	.451
.476	.032	.030	.030	.030	.032	.031	.033	.033	.033	.476
.501	.032		.028	.029	.030	.030	.031		.031	.501
.530	-.008	-.011	-.012	-.011	-.011		-.009	-.009	-.011	.530
.548							-.009			.548
.566							-.008			.566
.584	-.007	-.010	-.009	-.010	-.010	-.009	-.007	-.006	-.008	.584
.602							-.006			.602
.620							-.006			.620
.638	-.006	-.008		-.003	-.008		-.004		-.006	.638
.655							-.004			.655
.673							-.005			.673
.691	-.006	-.009	-.009		-.008	-.007		-.005	-.005	.691
.709							-.006			.709
.727							-.005			.727
.745	-.006	.003		-.008	-.008		-.005		-.005	.745
.763							-.006			.763
.781							-.006			.781
.799							-.005			.799
.817	-.006	-.008	-.008	-.008	-.008	-.007	-.005	-.005	-.005	.817
.834							-.006			.834
.870							-.005			.870
.888							-.004			.888
.921	-.053									.921
.924	-.006	-.007		-.008			-.004			.924
.947							-.005			.947
.964							-.005			.964
.981	-.001	-.004	-.006		-.007	-.004	-.004	-.002	-.002	.981
.984					-.008				-.005	.984
.998							-.007			.998
1.000	-.055									1.000

Nose rake			Base rake		
Orifice station, y, in.	Cp top	Cp side	Orifice station, y, in.	Cp top	Cp side
.010	.539		.031	.127	.107
.030	1.166		.094	.224	.210
.050	1.327		.156	.293	.262
.070	1.314		.219	.357	.326
.090	1.305		.281	.416	.375
.110	1.302		.344	.474	.436
.130	1.276		.406	.527	.509
.150	1.276		.469	.585	.574
.170	1.251		.750	.769	
.190	1.202		1.000	.826	
			1.250	.914	
			1.500	1.035	

[redacted]

TABLE 24. - PRESSURE COEFFICIENTS FOR AN INTERCONTINENTAL BALLISTIC MISSILE FOR NOSE V WITH NATURAL TRANSITION AT M = 3.96 - Continued

(e) $\alpha = 3.0^{\circ}$

Model station, $\frac{x}{l}$	Cp for meridian angle, θ, deg –									Model station, $\frac{x}{l}$
	0	90	105	120	150	165	180	225	270	
.059							1.781			.059
.060							1.793			.060
.061							1.746			.061
.063							1.668			.063
.064							1.565			.064
.075	.004	.010	.013	.016	.024	.026	.027	.021	.010	.075
.085	.069	.110	.120	.133	.151	.156	.159	.144	.109	.085
.096	.116		.141	.151	.168	.171	.173	.159	.127	.096
.119	.089	.124	.132	.139	.152	.157	.158	.146	.123	.119
.143							.016			.143
.154	-.008	.002	.005	.009	.015		.016	.010	.001	.154
.171							.016			.171
.189							.014			.189
.206	-.010	-.001	.000	.005	.010	.011	.013	.007	-.001	.206
.223							.012			.223
.241							.009			.241
.258	-.010	-.004	-.001	.000	.005	.006	.007	.002	.005	.258
.275							.005			.275
.293							.003			.293
.310	-.010	-.009	-.006	-.003	-.000	.001	.002	-.001	-.008	.310
.327							.001			.327
.344							-.000			.344
.362	-.010	-.010	-.009	-.007	-.002	-.001	-.001	-.003	-.010	.362
.379							-.001			.379
.396	-.010	-.011	-.010	-.008	-.003	-.001	-.001	-.006	-.012	.396
.408							-.001			.408
.426	.024	.025	.046	.031	.039	.042	.043	.036	.024	.426
.451	.030	.028	.031	.034	.058	.046	.046	.040	.028	.451
.476	.025	.026	.029	.034	.042	.046	.047	.039	.028	.476
.501	.024		.029	.034	.044	.048	.049		.027	.501
.530	-.011	-.013	-.011	-.008	-.001		-.000	-.004	-.013	.530
.548							-.000			.548
.566							-.000			.566
.584	-.014	-.012	-.010	-.008	-.003	-.001	.000	-.002	-.010	.584
.602							-.000			.602
.620							-.000			.620
.638	-.010	-.012		-.004	-.004		-.000		-.010	.638
.655							-.000			.655
.673							-.001			.673
.691	-.006	-.015	-.013		-.006	-.003		-.005	-.012	.691
.709							-.001			.709
.727							-.001			.727
.745	-.006	-.001		-.011	-.006		-.002		-.011	.745
.763							-.002			.763
.781							-.002			.781
.799							-.002			.799
.817	-.006	-.014	-.013	-.011	-.005	-.003	-.001	-.006	-.010	.817
.834							-.002			.834
.870							-.001			.870
.888							-.001			.888
.921	-.054									.921
.924	-.006	-.012		-.011			-.000			.924
.947							-.001			.947
.964							-.001			.964
.981	-.000	-.009	-.010		-.004	-.002	-.000	-.004	-.008	.981
.984					-.005				-.010	.984
.998							-.002			.998
1.000	-.055									1.000

Nose rake			Base rake		
Orifice station, y, in.	C_p top	C_p side	Orifice station, y, in.	C_p top	C_p side
.010	.396		.031	.096	.123
.030	1.017		.094	.143	.252
.050	1.198		.156	.190	.358
.070	1.205		.219	.239	.450
.090	1.203		.281	.284	.516
.110	1.203		.344	.304	.606
.130	1.192		.406	.335	.711
.150	1.183		.469	.369	.760
.170	1.158		.750	.494	
.190	1.109		1.000	.608	
			1.250	.711	
			1.500	.760	

[redacted]

TABLE 24. - PRESSURE COEFFICIENTS FOR AN INTERCONTINENTAL BALLISTIC MISSILE FOR NOSE V WITH NATURAL TRANSITION AT M = 3.96 - Continued

(f) $\alpha = 6.3^{\circ}$

Model station, $\frac{x}{l}$	Cp for meridian angle, θ, deg – 0	90	105	120	150	165	180	225	270	Model station, $\frac{x}{l}$
.059							1.776			.059
.060							1.780			.060
.061							1.756			.061
.063							1.689			.063
.064							1.613			.064
.075	-.003	.013	.017	.026	.037	.044	.047	.034	.012	.075
.085	.036	.112	.135	.164	.203	.215	.221	.188	.110	.085
.096	.069		.153	.177	.212	.220	.226	.195	.128	.096
.119	.056	.123	.139	.158	.187	.195	.199	.174	.123	.119
.143							.040			.143
.154	-.019	.001	.009	.019	.034		.041	.027	.002	.154
.171							.039			.171
.189							.036			.189
.206	-.016	-.003	.003	.012	.027	.030	.032	.020	-.002	.206
.223							.029			.223
.241							.026			.241
.258	-.013	-.009	-.003	.003	.018	.022	.022	.011	.002	.258
.275							.020			.275
.293							.018			.293
.310	-.010	-.015	-.010	-.002	.011	.015	.017	.003	-.015	.310
.327							.016			.327
.344							.014			.344
.362	-.009	-.020	-.015	-.008	.007	.012	.014	.002	-.020	.362
.379							.012			.379
.396	-.008	-.023	-.018	-.010	.006	.010	.011	-.000	-.023	.396
.408							.011			.408
.426	.022	.005	.036	.028	.057	.066	.069	.045	.005	.426
.451	.027	.010	.018	.033	.078	.072	.079	.051	.010	.451
.476	.022	.009	.021	.037	.071	.081	.086	.057	.012	.476
.501	.019		.024	.040	.074	.086	.092		.014	.501
.530	-.014	-.023	-.016	-.006	.013		.025	.007	-.021	.530
.548							.021			.548
.566							.020			.566
.584	-.018	-.026	-.019	-.011	.007	.013	.018	.002	-.024	.584
.602							.018			.602
.620							.016			.620
.638	-.013	-.029		-.008	.005		.017		-.026	.638
.655							.016			.655
.673							.016			.673
.691	-.009	-.032	-.025		.003	.009		-.001	-.029	.691
.709							.015			.709
.727							.015			.727
.745	-.008	-.015		-.016	.003		.015		-.030	.745
.763							.015			.763
.781							.014			.781
.799							.014			.799
.817	-.008	-.033	-.026	-.016	.005	.011	.015	-.001	-.030	.817
.834							.015			.834
.870							.015			.870
.888							.017			.888
.921	-.057									.921
.924	-.008	-.030		-.018			.017			.924
.947							.016			.947
.964							.016			.964
.981	-.005	-.027	-.028		.003	.012	.016	-.001	-.031	.981
.984					.003				-.031	.984
.998							.015			.998
1.000	-.059									1.000

Nose rake			Base rake		
Orifice station, y, in.	Cp top	Cp side	Orifice station, y, in.	Cp top	Cp side
.010	.161		.031	.206	.078
.030	.751		.094	.401	.349
.050	1.015		.156	.472	.590
.070	1.053		.219	.504	.736
.090	1.053		.281	.530	.892
.110	1.065		.344	.546	.991
.130	1.060		.406	.563	1.062
.150	1.056		.469	.568	1.103
.170	1.038		.750	.608	
.190	1.000		1.000	.637	
			1.250	.675	
			1.500	.707	

[redacted]

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TABLE 24. - PRESSURE COEFFICIENTS FOR AN INTERCONTINENTAL BALLISTIC MISSILE FOR NOSE V WITH NATURAL TRANSITION AT M = 3.96 - Concluded

(g) $\alpha = 10.1^{\circ}$

Model station, $\frac{x}{l}$	Cp for meridian angle, θ, deg – 0	90	105	120	150	165	180	225	270	Model station, $\frac{x}{l}$
.059							1.718			.059
.060							1.788			.060
.061							1.783			.061
.063							1.756			.063
.064							1.656			.064
.075	-.010	.014	.022	.038	.065	.085	.091	.056	.012	.075
.085	.012	.115	.153	.203	.275	.296	.307	.241	.109	.085
.096	.027		.172	.208	.267	.282	.292	.239	.132	.096
.119	.027	.122	.151	.180	.235	.251	.259	.209	.122	.119
.143							.080			.143
.154	-.025	.002	.016	.034	.067		.083	.050	.001	.154
.171							.077			.171
.189							.068			.189
.206	-.019	-.006	.004	.021	.052	.059	.063	.036	-.007	.206
.223							.059			.223
.241							.055			.241
.258	-.012	-.017	-.005	.009	.040	.049	.052	.025	-.004	.258
.275							.052			.275
.293							.048			.293
.310	-.007	-.026	-.014	.001	.032	.043	.047	.018	-.027	.310
.327							.046			.327
.344							.046			.344
.362	-.006	-.034	-.021	-.003	.029	.040	.045	.014	-.034	.362
.379							.045			.379
.396	-.008	-.036	-.024	-.006	.030	.040	.045	.012	-.036	.396
.408							.045			.408
.426	.022	-.015	.029	.035	.096	.116	.123	.070	-.016	.426
.451	.029	-.010	.012	.048	.126	.138	.146	.085	-.010	.451
.476	.023	-.008	.019	.055	.126	.147	.157	.094	-.007	.476
.501	.019		.023	.059	.130	.152	.162		-.005	.501
.530	-.018	-.034	-.018	.001	.041		.059	.023	-.035	.530
.548							.055			.548
.566							.052			.566
.584	-.023	-.037	-.024	-.006	.032	.045	.050	.017	-.039	.584
.602							.049			.602
.620							.048			.620
.638	-.019	-.040		-.002	.029		.049		-.041	.638
.655							.050			.655
.673							.049			.673
.691	-.018	-.042	-.028		.028	.042		.014	-.042	.691
.709							.048			.709
.727							.049			.727
.745	-.020	-.023		-.010	.029		.049		-.042	.745
.763							.049			.763
.781							.047			.781
.799							.047			.799
.817	-.020	-.041	-.030	-.012	.027	.042	.049	.012	-.042	.817
.834							.048			.834
.870							.048			.870
.888							.047			.888
.921	-.059									.921
.924	-.023	-.038		-.014			.046			.924
.947							.043			.947
.964							.045			.964
.981	-.019	-.034	-.033		.025	.040	.045	.010	-.040	.981
.984					.025				-.041	.984
.998							.045			.998
1.000	-.060									1.000

Nose rake			Base rake		
Orifice station, y, in.	C_p top	C_p side	Orifice station, y, in.	C_p top	C_p side
.010	.047		.031	.253	.032
.030	.318		.094	.575	.354
.050	.741		.156	.564	.667
.070	.908		.219	.553	.806
.090	.895		.281	.559	.917
.110	.895		.344	.559	1.018
.130	.895		.406	.557	1.065
.150	.895		.469	.550	1.103
.170	.881		.750	.514	
.190	.843		1.000	.515	
			1.250	.553	
			1.500	.609	

[redacted]

[redacted]

TABLE 25. - PRESSURE COEFFICIENTS FOR AN INTERCONTINENTAL BALLISTIC MISSILE FOR NOSE V WITH NATURAL TRANSITION AT M = 4.65

(a) $\alpha = -6.3^{\circ}$

Model station, $\frac{x}{l}$	Cp for meridian angle, θ, deg –									Model station, $\frac{x}{l}$
	0	90	105	120	150	165	180	225	270	
.059							1.835			.059
.060							1.763			.060
.061							1.671			.061
.063							1.553			.063
.064							1.440			.064
.075	.073	.040	.034	.030	.024	.022	.021	.025	.037	.075
.085	.230	.138	.113	.098	.070	.062	.060	.072	.122	.085
.096	.276		.131	.113	.084	.075	.073	.087	.136	.096
.119	.195	.135	.122	.108	.087	.080	.077	.090	.125	.119
.143							.002			.143
.154	.050	.017	.012	.007	.002		.000	.003	.013	.154
.171							.000			.171
.189							-.000			.189
.206	.039	.011	.006	.002	.000	-.000	-.002	.001	.006	.206
.223							-.002			.223
.241							-.002			.241
.258	.029	.004	.002	-.001	-.000	-.000	-.002	-.000	.022	.258
.275							.002			.275
.293							.001			.293
.310	.021	-.0	-.000	-.004	-.001	-.000	.000	-.002	-.004	.310
.327							.001			.327
.344							.001			.344
.362	.016	-.004	-.006	-.006	-.001	-.000	.001	-.003	-.007	.362
.379							.001			.379
.396	.017	-.007	-.006	-.006	-.001	-.000	.001	-.004	-.010	.396
.408							.001			.408
.426	.057	.030	.050	.011	.020	.022	.022	.018	.010	.426
.451	.064	.019	.014	.015	.056	.024	.027	.022	.014	.451
.476	.070	.018	.014	.015	.020	.022	.023	.018	.012	.476
.501	.077		.014	.015	.017	.019	.020		.014	.501
.530	.029	-.006	-.007	-.006	-.005		-.003	-.006	-.008	.530
.548							-.006			.548
.566							-.006			.566
.584	.022	-.007	-.009	-.006	-.007	-.009	-.006	-.005	-.011	.584
.602							-.006			.602
.620							-.005			.620
.638	.017	-.010		.001	-.006		-.005		-.013	.638
.655							-.002			.655
.673							-.004			.673
.691	.017	-.012	-.011		-.006	-.003		-.006	-.013	.691
.709							-.002			.709
.727							-.001			.727
.745	.017	.013		-.009	-.006		-.000		-.012	.745
.763							-.001			.763
.781							-.001			.781
.799							-.001			.799
.817	.017	-.013	-.011	-.008	-.004	-.003	-.001	-.004	-.015	.817
.834							-.000			.834
.870							-.001			.870
.888							-.000			.888
.921	-.031									.921
.924	.017	-.012		-.008			-.001			.924
.947							-.002			.947
.964							.000			.964
.981	.022	-.011	-.009		-.008	-.006	-.001	-.007	-.013	.981
.984					-.006				-.013	.984
.998							-.005			.998
1.000	-.030									1.000

Nose rake			Base rake		
Orifice station, y, in.	Cp top	Cp side	Orifice station, y, in.	Cp top	Cp side
.010	.737		.031	.350	.057
.030	1.410		.094	.786	.271
.050	1.560		.156	1.090	.449
.070	1.533		.219	1.404	.555
.090	1.510		.281	1.556	.673
.110	1.496		.344	1.632	.804
.130	1.486		.406	1.692	.882
.150	1.475		.469	1.726	.940
.170	1.450		.750	1.828	
.190	1.401		1.000	1.869	
			1.250	1.897	
			1.500	1.860	

[redacted]

TABLE 25. - PRESSURE COEFFICIENTS FOR AN INTERCONTINENTAL BALLISTIC MISSILE FOR NOSE V WITH NATURAL TRANSITION AT M = 4.65 - Continued

(b) $\alpha = -3.0^{\circ}$

Model station, $\frac{x}{l}$	Cp for meridian angle, θ, deg –									Model station, $\frac{x}{l}$
	0	90	105	120	150	165	180	225	270	
.059							4.799			.059
.060							1.833			.060
.061							1.780			.061
.063							1.700			.063
.064							1.603			.064
.075	.053	.040	.037	.034	.033	.029	.029	.032	.036	.075
.085	.172	.136	.124	.118	.096	.093	.091	.097	.120	.085
.096	.221		.139	.130	.115	.110	.107	.111	.133	.096
.119	.154	.135	.129	.122	.111	.108	.105	.108	.125	.119
.143							.006			.143
.154	.031	.017	.015	.012	.008		.005	.007	.014	.154
.171							.003			.171
.189							.002			.189
.206	.023	.011	.008	.006	.003	.002	.001	.004	.007	.206
.223							.001			.223
.241							.001			.241
.258	.016	.007	.004	.003	.001	.000	.001	.002	.025	.258
.275							.001			.275
.293							.001			.293
.310	.010	.002	.000	.000	-.000	-.000	.001	.000	.000	.310
.327							-.001			.327
.344							-.001			.344
.362	.006	-.001	-.002	-.002	-.001	-.002	.000	-.001	-.002	.362
.379							.002			.379
.396	.007	-.004	-.003	-.002	.001	.001	.002	.001	-.004	.396
.408							.004			.408
.426	.036	.027	.059	.022	.014	.012	.012	.014	.024	.426
.451	.043	.029	.027	.026	.056	.019	.021	.019	.027	.451
.476	.041	.027	.024	.023	.022	.021	.021	.022	.024	.476
.501	.046		.022	.019	.020	.019	.021		.023	.501
.530	.012	-.004	-.005	-.006	-.007		-.004	-.006	-.007	.530
.548							-.007			.548
.566							-.005			.566
.584	.007	-.003	-.006	-.006	-.008	-.007	-.005	-.006	-.007	.584
.602							-.006			.602
.620							-.005			.620
.638	.005	-.004		.003	-.006		-.005		-.006	.638
.655							-.002			.655
.673							-.004			.673
.691	.004	-.006	-.006		-.005	-.003		-.004	-.006	.691
.709							-.003			.709
.727							-.001			.727
.745	.004	.018		-.006	-.004		-.000		-.007	.745
.763							-.001			.763
.781							-.001			.781
.799							-.001			.799
.817	.005	-.007	-.006	-.006	-.001	-.002	-.001	-.002	-.006	.817
.834							-.001			.834
.870							-.001			.870
.888							-.002			.888
.921	-.031									.921
.924	.005	-.007		-.006			-.001			.924
.947							-.002			.947
.964							-.000			.964
.981	.006	-.004	-.006		-.004	-.003	-.001	-.003	-.004	.981
.984					-.004				-.006	.984
.998							-.006			.998
1.000	-.031									1.000

Nose rake			Base rake		
Orifice station, y, in.	Cp top	Cp side	Orifice station, y, in.	Cp top	Cp side
.010	.580		.031	.163	.091
.030	1.248		.094	.326	.207
.050	1.430		.156	.437	.289
.070	1.425		.219	.564	.363
.090	1.409		.281	.647	.412
.110	1.403		.344	.725	.476
.130	1.386		.406	.785	.559
.150	1.372		.469	.872	4.794
.170	1.345		.750	1.114	
.190	1.294		1.000	1.276	
			1.250	1.398	
			1.500	1.476	

[redacted]

TABLE 25. - PRESSURE COEFFICIENTS FOR AN INTERCONTINENTAL BALLISTIC MISSILE FOR NOSE V WITH NATURAL TRANSITION AT M = 4.65 - Continued

(c) $\alpha = 0^{\circ}$

Model station, $\frac{x}{l}$	Cp for meridian angle, θ, deg – 0	90	105	120	150	165	180	225	270	Model station, $\frac{x}{l}$
.059							1.840			.059
.060							1.812			.060
.061							1.750			.061
.063							1.678			.063
.064							1.556			.064
.075	.036	.040	.040	.041	.041	.041	.041	.040	.038	.075
.085	.124	.134	.135	.136	.132	.130	.128	.122	.119	.085
.096	.172		.149	.147	.146	.143	.142	.136	.131	.096
.119	.123	.134	.135	.135	.135	.133	.132	.126	.124	.119
.143							.017			.143
.154	.017	.018	.017	.016	.017		.015	.013	.014	.154
.171							.011			.171
.189							.008			.189
.206	.011	.012	.010	.011	.011	.010	.008	.008	.007	.206
.223							.006			.223
.241							.006			.241
.258	.007	.007	.008	.007	.007	.006	.005	.004	.025	.258
.275							.005			.275
.293							.002			.293
.310	.003	.003	.004	.004	.002	.002	.002	.002	.002	.310
.327							.001			.327
.344							.001			.344
.362	-.000	-.0	.000	.001	.000	-.000	.000	-.000	-.000	.362
.379							-.000			.379
.396	.002	-.001	-.001	-.000	.000	-.000	-.000	-.000	-.002	.396
.408							-.001			.408
.426	.026	.029	.062	.027	.027	.026	.025	.025	.024	.426
.451	.034	.032	.031	.032	.064	.031	.033	.032	.029	.451
.476	.030	.029	.029	.029	.029	.029	.029	.029	.028	.476
.501	.033		.027	.028	.028	.027	.027		.025	.501
.530	.003	-.003	-.004	-.003	-.004		-.003	-.004	-.005	.530
.548							-.004			.548
.566							-.003			.566
.584	-.000	-.002	-.003	-.003	-.004	-.006	-.002	-.005	-.006	.584
.602							-.002			.602
.620							-.002			.620
.638	-.001	-.002		.006	-.004		-.001		-.005	.638
.655							-.001			.655
.673							-.001			.673
.691	-.000	-.003	-.004		-.004	-.003		-.002	-.003	.691
.709							-.001			.709
.727							-.001			.727
.745	.000	.020		-.003	-.004		-.002		-.003	.745
.763							-.001			.763
.781							-.002			.781
.799							-.001			.799
.817	-.000	-.004	-.003	-.003	-.004	-.002	-.001	-.002	-.001	.817
.834							-.002			.834
.870							-.001			.870
.888							-.001			.888
.921	-.030									.921
.924	-.000	-.004		-.004			-.001			.924
.947							-.002			.947
.964							-.002			.964
.981	-.000	-.001	-.003		-.002	-.003	-.001	-.002	-.002	.981
.984					-.003				-.004	.984
.998							-.005			.998
1.000	-.032									1.000

Nose rake			Base rake		
Orifice station, y, in.	Cp top	Cp side	Orifice station, y, in.	Cp top	Cp side
.010	.464		.031	.091	.103
.030	1.116		.094	.172	.165
.050	1.331		.156	.223	.236
.070	1.326		.219	.282	.289
.090	1.319		.281	.319	.338
.110	1.312		.344	.363	.409
.130	1.280		.406	.411	.444
.150	1.245		.469	.455	.511
.170	1.211		.750	.607	
.190	1.213		1.000	.665	
			1.250	.718	
			1.500	.794	

[redacted]

TABLE 25. - PRESSURE COEFFICIENTS FOR AN INTERCONTINENTAL BALLISTIC MISSILE FOR NOSE V WITH NATURAL TRANSITION AT M = 4.65 - Continued

(d) $\alpha = 3.0^{\circ}$

Model station, $\frac{x}{t}$	Cp for meridian angle, θ, deg –									Model station, $\frac{x}{t}$
	0	90	105	120	150	165	180	225	270	
.059							1.823			.059
.060							1.814			.060
.061							1.772			.061
.063							1.698			.063
.064							1.611			.064
.075	.027	.037	.042	.045	.052	.055	.054	.046	.036	.075
.085	.088	.135	.144	.158	.167	.173	.175	.154	.118	.085
.096	.130		.159	.167	.183	.184	.184	.165	.132	.096
.119	.095	.134	.140	.147	.158	.161	.161	.147	.122	.119
.143							.030			.143
.154	.009	.017	.021	.024	.028		.030	.020	.010	.154
.171							.026			.171
.189							.023			.189
.206	.004	.011	.013	.017	.021	.020	.021	.015	.006	.206
.223							.018			.223
.241							.015			.241
.258	.002	.006	.009	.011	.014	.014	.014	.008	.023	.258
.275							.012			.275
.293							.010			.293
.310	.002	.002	.005	.005	.008	.008	.008	.004	-.001	.310
.327							.006			.327
.344							.005			.344
.362	-.000	-.0	.000	.001	.004	.004	.003	.001	-.004	.362
.379							.003			.379
.396	.001	-.003	-.001	-.000	.002	.003	.003	-.001	-.005	.396
.408							.003			.408
.426	.024	.026	.063	.030	.037	.038	.038	.027	.017	.426
.451	.029	.029	.031	.034	.070	.041	.043	.035	.023	.451
.476	.023	.027	.029	.033	.039	.042	.041	.033	.024	.476
.501	.027		.029	.033	.041	.042	.043		.023	.501
.530	.001	-.004	-.003	-.000	.003		.003	-.000	-.006	.530
.548							.003			.548
.566							.003			.566
.584	-.003	-.002	-.003	-.000	.001	.002	.003	-.002	-.008	.584
.602							.003			.602
.620							.003			.620
.638	-.004	-.004		.006	-.000		.003		-.007	.638
.655							.003			.655
.673							.001			.673
.691	-.002	-.004	-.004		-.000	.001		-.003	-.006	.691
.709							.001			.709
.727							.001			.727
.745	-.000	.019		-.002	.000		.001		-.007	.745
.763							.000			.763
.781							.000			.781
.799							.000			.799
.817	.000	-.008	-.005	-.003	.002	.000	.000	-.004	-.007	.817
.834							.000			.834
.870							.000			.870
.888							.000			.888
.921	-.031									.921
.924	-.000	-.005		-.004			.000			.924
.947							-.001			.947
.964							.000			.964
.981	.001	-.004	-.006		.001	.001	.001	-.005	-.005	.981
.984					-.000				-.004	.984
.998							-.002			.998
1.000	-.031									1.000

Nose rake			Base rake		
Orifice station, y, in.	C_p top	C_p side	Orifice station, y, in.	C_p top	C_p side
.010	.275		.031	.068	.100
.030	.946		.094	.114	.209
.050	1.227		.156	.149	.298
.070	1.210		.219	.190	.358
.090	1.196		.281	.206	.432
.110	1.196		.344	.236	.503
.130	1.185		.406	.269	.591
.150	1.174		.469	.298	.646
.170	1.141		.750	.404	
.190	1.097		1.000	.513	
			1.250	.582	
			1.500	.623	

[redacted]

TABLE 25. - PRESSURE COEFFICIENTS FOR AN INTERCONTINENTAL BALLISTIC MISSILE FOR NOSE V WITH NATURAL TRANSITION AT M = 4.65 - Continued

(e) $\alpha = 6.3^{\circ}$

Model station, $\frac{x}{l}$	Cp for meridian angle, θ, deg –									Model station, $\frac{x}{l}$
	0	90	105	120	150	165	180	225	270	
.059							1.819			.059
.060							1.837			.060
.061							1.810			.061
.063							1.759			.063
.064							1.653			.064
.075	.019	.036	.042	.052	.069	.076	.077	.060	.036	.075
.085	.058	.137	.160	.187	.218	.229	.235	.194	.120	.085
.096	.092		.171	.193	.223	.228	.231	.199	.133	.096
.119	.069	.134	.149	.166	.190	.196	.199	.170	.125	.119
.143							.047			.143
.154	-.000	.016	.024	.032	.045		.052	.035	.012	.154
.171							.048			.171
.189							.046			.189
.206	-.002	.010	.015	.024	.036	.039	.043	.025	.006	.206
.223							.040			.223
.241							.035			.241
.258	-.001	.002	.008	.013	.025	.028	.031	.017	.022	.258
.275							.029			.275
.293							.026			.293
.310	.000	-.002	.002	.007	.017	.021	.023	.010	-.004	.310
.327							.021			.327
.344							.020			.344
.362	-.001	-.007	-.003	.001	.014	.015	.019	.005	-.009	.362
.379							.017			.379
.396	.001	-.009	-.004	.000	.012	.015	.017	.004	-.011	.396
.408							.017			.408
.426	.022	.012	.057	.032	.052	.059	.060	.035	.008	.426
.451	.028	.016	.023	.036	.085	.066	.067	.042	.011	.451
.476	.021	.017	.025	.038	.064	.072	.075	.046	.014	.476
.501	.024		.028	.041	.070	.078	.081		.013	.501
.530	.000	-.008	-.004	.004	.021		.026	.008	-.010	.530
.548							.023			.548
.566							.021			.566
.584	-.006	-.009	-.006	-.000	.014	.018	.020	.003	-.012	.584
.602							.018			.602
.620							.018			.620
.638	-.007	-.012		.007	.012		.017		-.013	.638
.655							.017			.655
.673							.017			.673
.691	-.004	-.013	-.009		.011	.015		-.000	-.015	.691
.709							.017			.709
.727							.017			.727
.745	-.002	.011		-.004	.011		.017		-.015	.745
.763							.017			.763
.781							.016			.781
.799							.016			.799
.817	-.002	-.015	-.010	-.004	.011	.015	.016	-.001	-.015	.817
.834							.017			.834
.870							.016			.870
.888							.016			.888
.921	-.033									.921
.924	-.004	-.015		-.004			.016			.924
.947							.015			.947
.964							.015			.964
.981	-.002	-.013	-.012		.010	.016	.015	-.001	-.014	.981
.984					.009				-.014	.984
.998							.015			.998
1.000	-.033									1.000

Nose rake			Base rake		
Orifice station, y, in.	Cp top	Cp side	Orifice station, y, in.	Cp top	Cp side
.010	.144		.031	.091	.050
.030	.727		.094	.216	.269
.050	1.105		.156	.253	.441
.070	1.084		.219	.296	.559
.090	1.068		.281	.310	.683
.110	1.068		.344	.335	.805
.130	1.061		.406	.338	.877
.150	1.045		.469	.352	.948
.170	1.026		.750	.400	
.190	.969		1.000	.453	
			1.250	.511	
			1.500	.554	

[redacted]

[redacted]

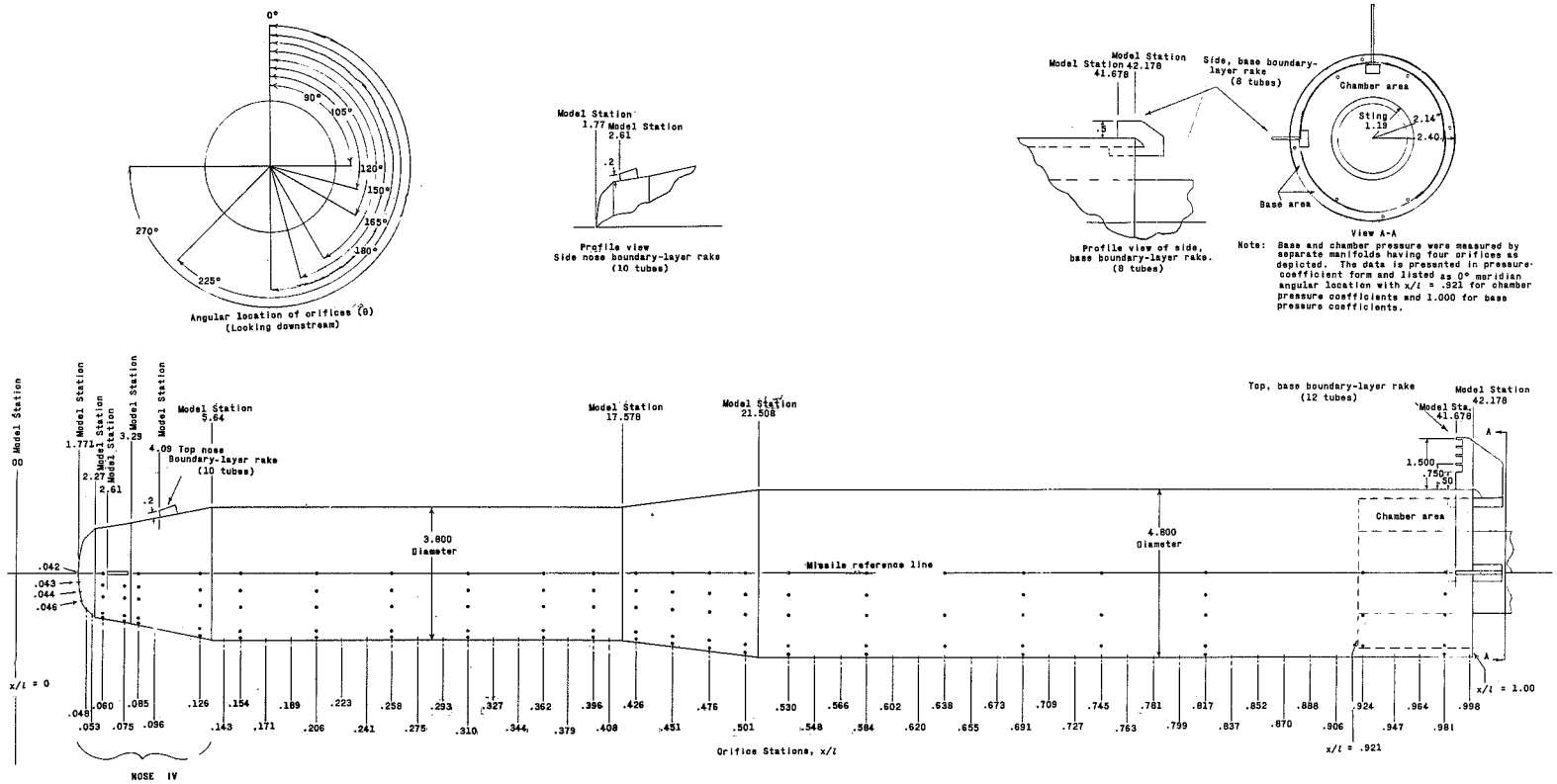
TABLE 25. - PRESSURE COEFFICIENTS FOR AN INTERCONTINENTAL BALLISTIC MISSILE FOR NOSE V WITH NATURAL TRANSITION AT M = 4.65 - Concluded

(f) $\alpha = 10.1^{\circ}$

Model station, $\frac{x}{l}$	Cp for meridian angle, θ, deg –									Model station, $\frac{x}{l}$
	0	90	105	120	150	165	180	225	270	
.059							1.755			.059
.060							1.787			.060
.061							1.801			.061
.063							1.761			.063
.064							1.685			.064
.075	.011	.037	.050	.067	.095	.117	.118	.077	.035	.075
.085	.032	.134	.169	.219	.280	.300	.308	.239	.119	.085
.096	.055		.181	.215	.267	.280	.286	.233	.135	.096
.119	.043	.129	.153	.181	.228	.244	.248	.197	.120	.119
.143							.087			.143
.154	-.004	.016	.028	.046	.076		.089	.055	.012	.154
.171							.083			.171
.189							.074			.189
.206	-.003	.007	.017	.033	.058	.065	.067	.041	.004	.206
.223							.062			.223
.241							.058			.241
.258	-.001	-.0	.005	.020	.045	.054	.056	.029	.017	.258
.275							.055			.275
.293							.050			.293
.310	-.000	-.006	.001	.011	.036	.045	.048	.022	-.011	.310
.327							.047			.327
.344							.046			.344
.362	-.000	-.012	-.005	.005	.032	.041	.045	.017	-.015	.362
.379							.044			.379
.396	.002	-.014	-.007	.004	.032	.040	.044	.015	-.016	.396
.408							.044			.408
.426	.022	.002	.053	.038	.088	.105	.109	.055	-.006	.426
.451	.028	.005	.023	.051	.131	.130	.137	.072	-.000	.451
.476	.022	.007	.028	.059	.126	.144	.151	.085	.001	.476
.501	.022		.033	.063	.131	.151	.158		.001	.501
.530	-.000	-.012	-.002	.014	.049		.063	.026	-.016	.530
.548							.057			.548
.566							.054			.566
.584	-.007	-.013	-.007	.005	.036	.048	.051	.018	-.018	.584
.602							.051			.602
.620							.050			.620
.638	-.009	-.016		.011	.034		.051		-.020	.638
.655							.051			.655
.673							.051			.673
.691	-.007	-.018	-.010		.035	.046		.015	-.021	.691
.709							.051			.709
.727							.051			.727
.745	-.007	.009		.002	.035		.051		-.021	.745
.763							.051			.763
.781							.049			.781
.799							.049			.799
.817	-.007	-.017	-.011	.000	.034	.045	.051	.013	-.021	.817
.834							.048			.834
.870							.049			.870
.888							.049			.888
.921	-.033									.921
.924	-.008	-.019		-.000			.048			.924
.947							.047			.947
.964							.045			.964
.981	-.010	-.017	-.014		.032	.043	.046	.012	-.019	.981
.984					.032				-.021	.984
.998							.046			.998
1.000	-.033									1.000

Nose rake			Base rake		
Orifice station, y, in.	C_p top	C_p side	Orifice station, y, in.	C_p top	C_p side
.010	.080		.031	.131	.041
.030	.299		.094	.431	.334
.050	.874		.156	.398	.564
.070	.929		.219	.410	.703
.090	.903		.281	.414	.866
.110	.901		.344	.414	1.000
.130	.908		.406	.414	1.083
.150	.899		.469	.410	1.157
.170	.894		.750	.387	
.190	.878		1.000	.373	
			1.250	.405	
			1.500	.433	

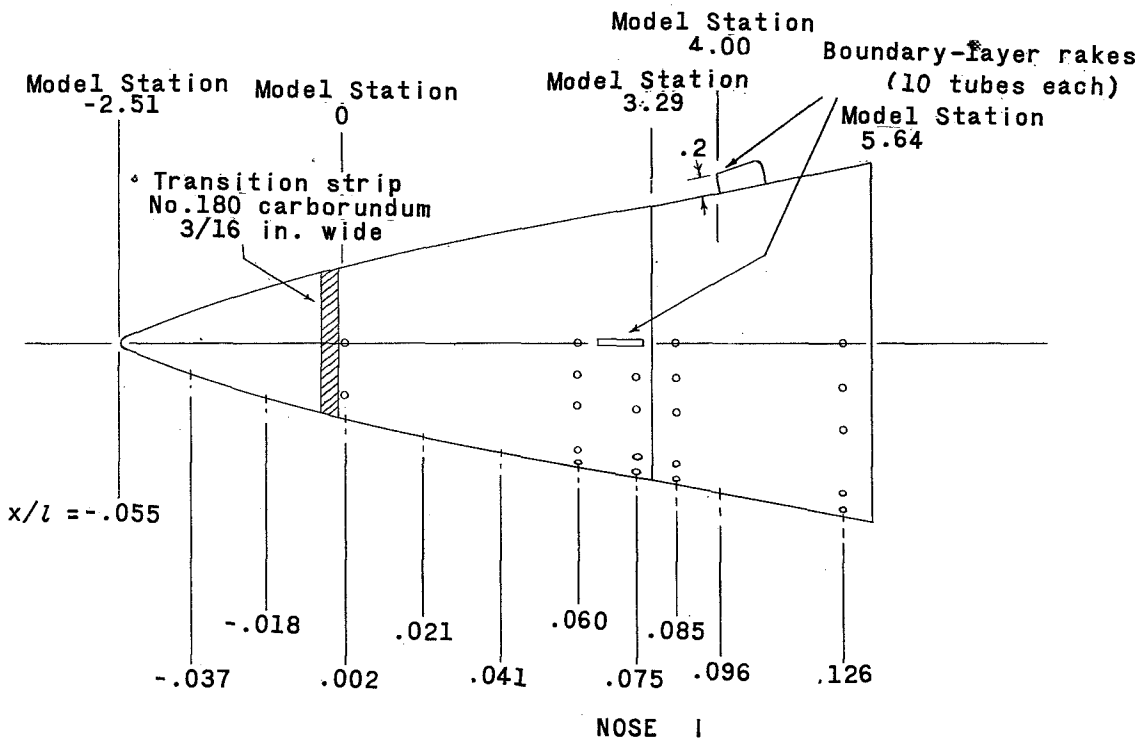
[redacted]

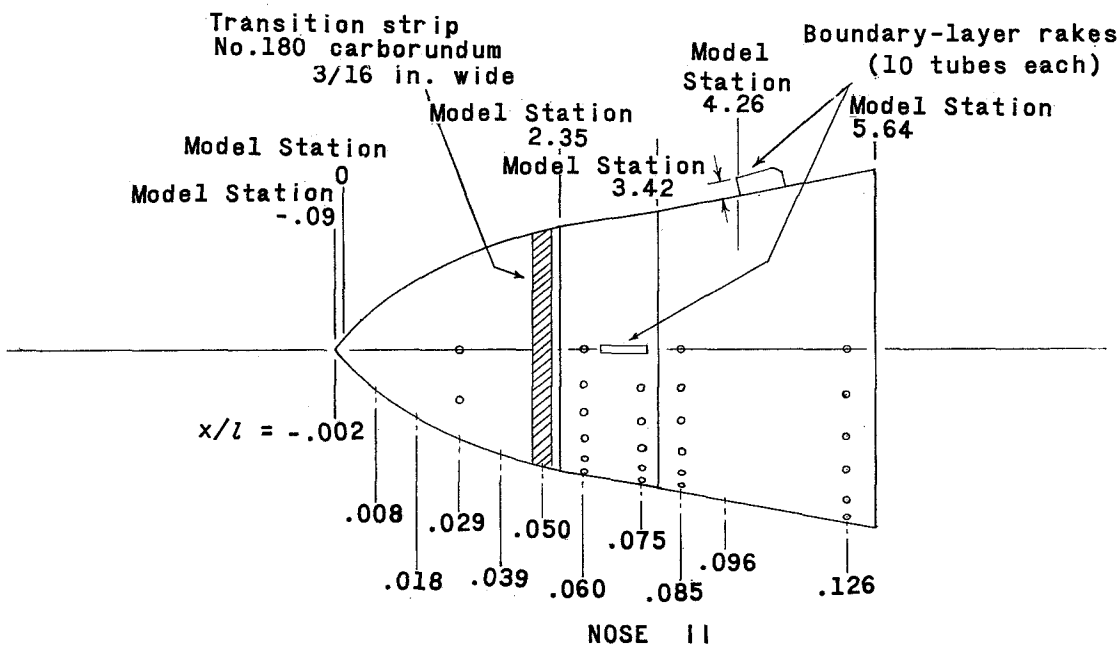


(a) Complete model with nose IV attached.

Figure 1.- Details of model of an intercontinental ballistic missile. (All dimensions are in inches unless otherwise noted.)

[redacted]



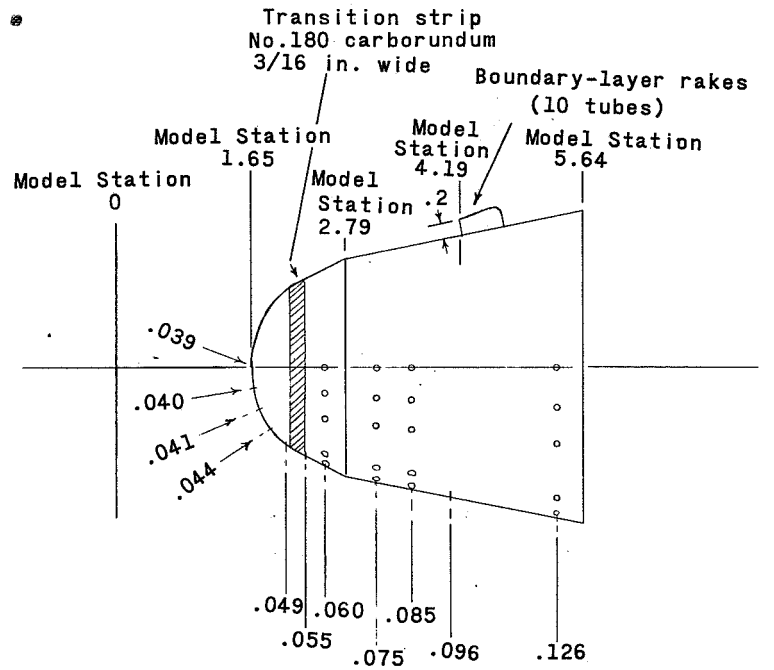


(b) Details of noses I and II.

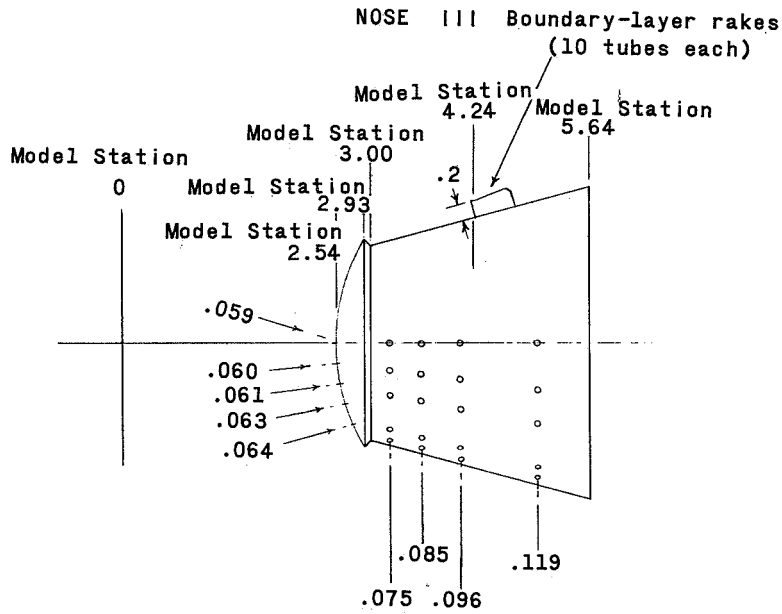
Figure 1.- Continued.

[redacted]

[redacted]



NOSE III

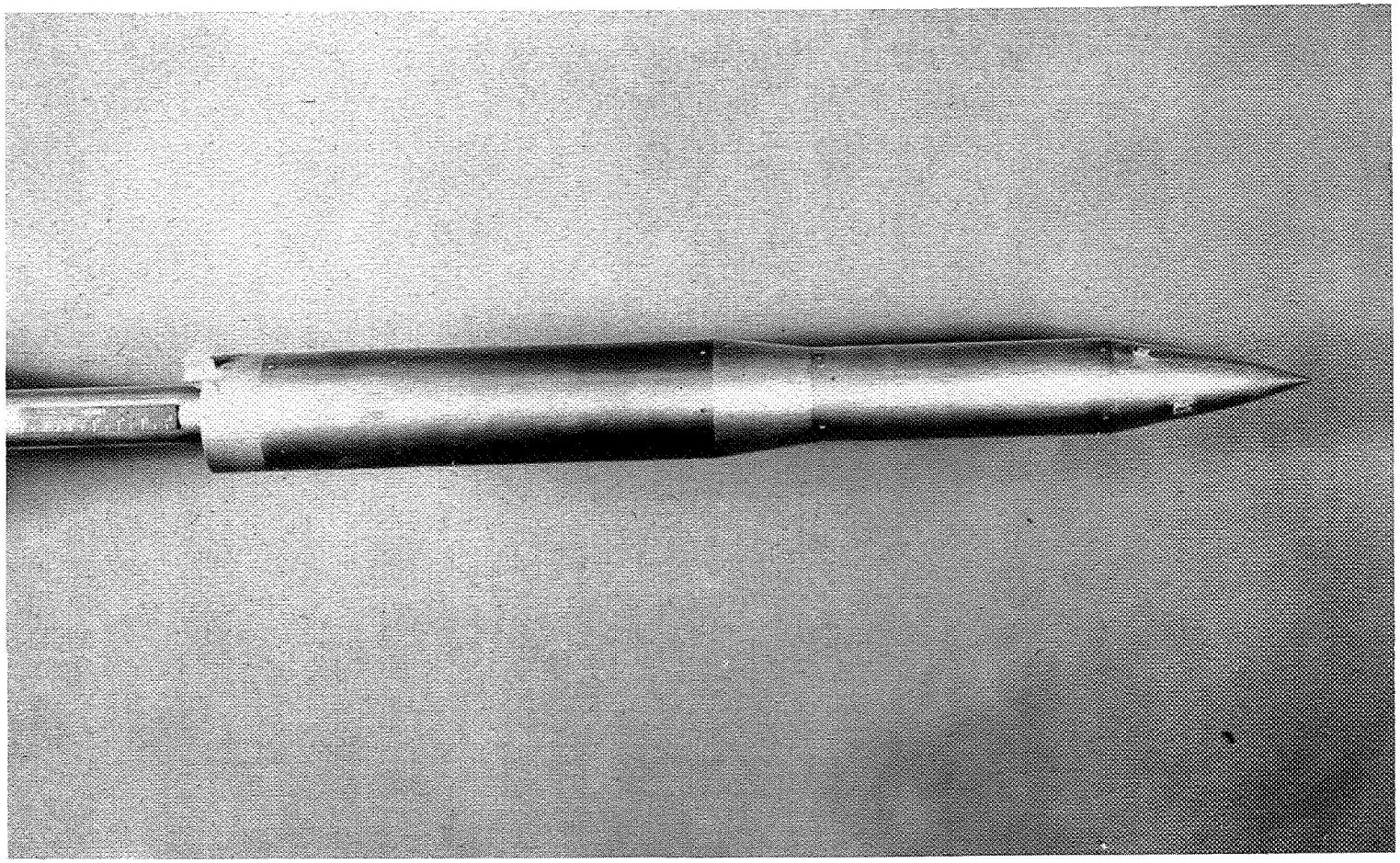


NOSE V

(c) Details of noses III and V.

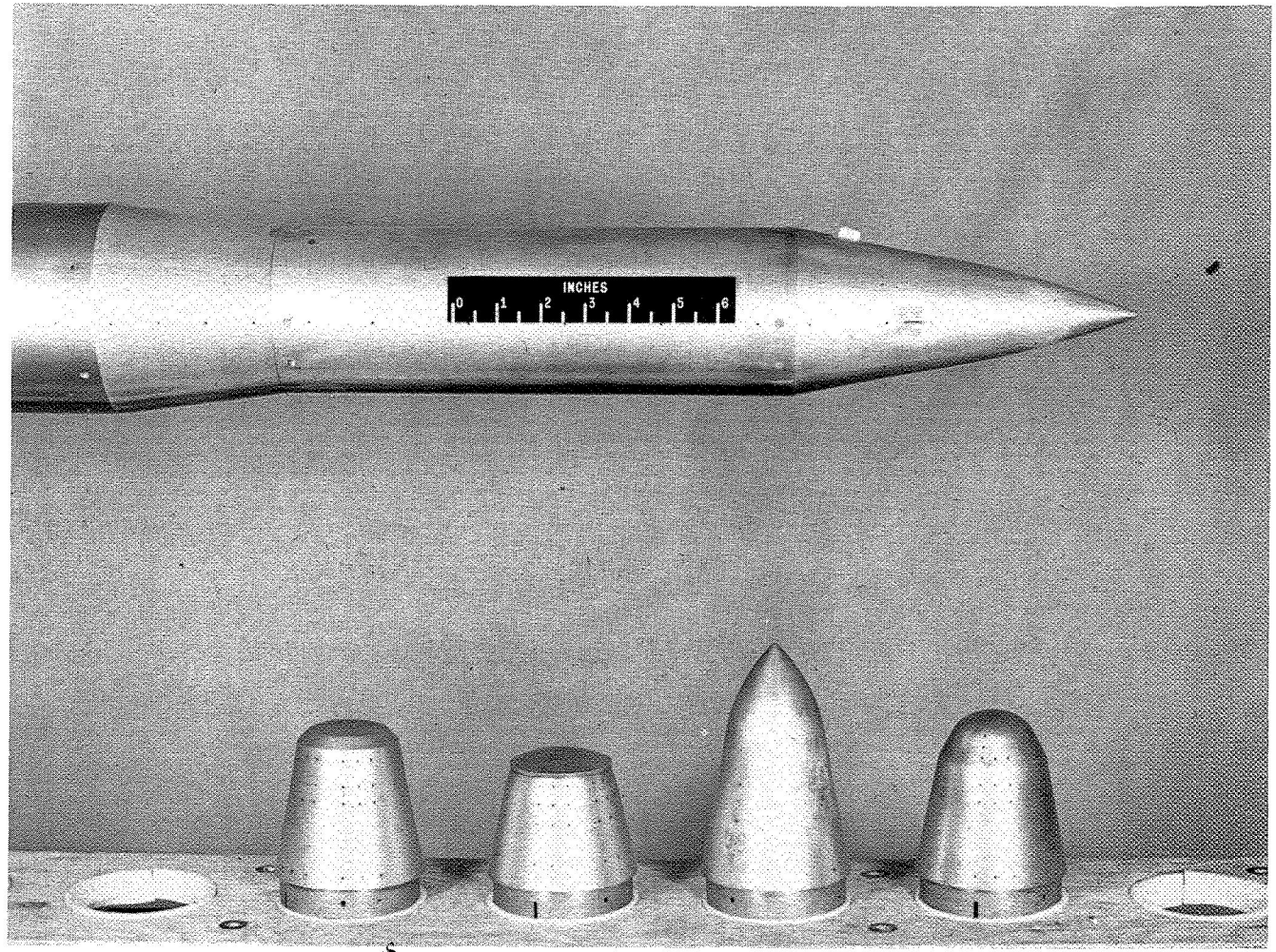
Figure 1.- Concluded.

[redacted]



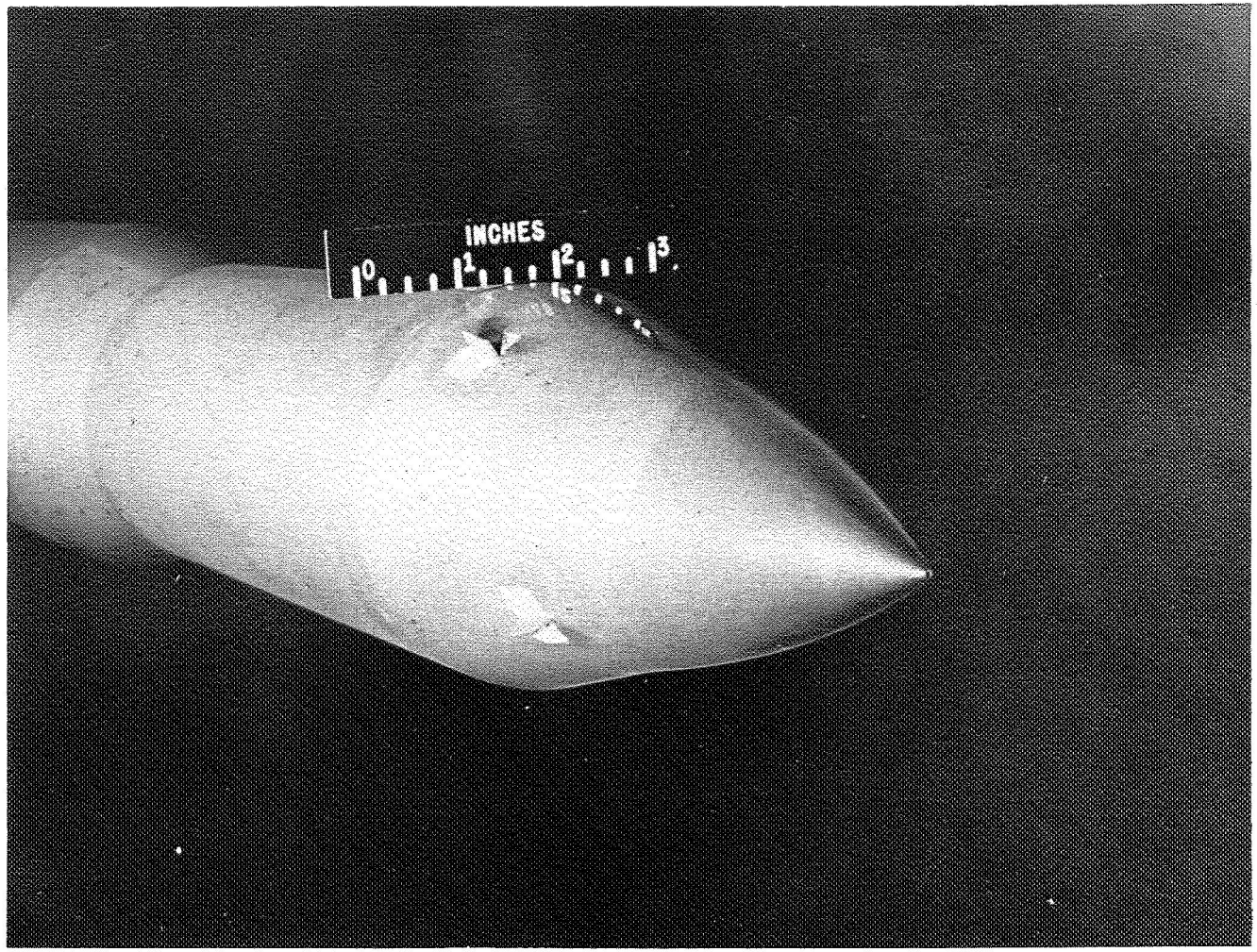
(a) Complete model with nose I attached. L-57-3067

Figure 2.- Photographs of test model of an intercontinental ballistic missile.



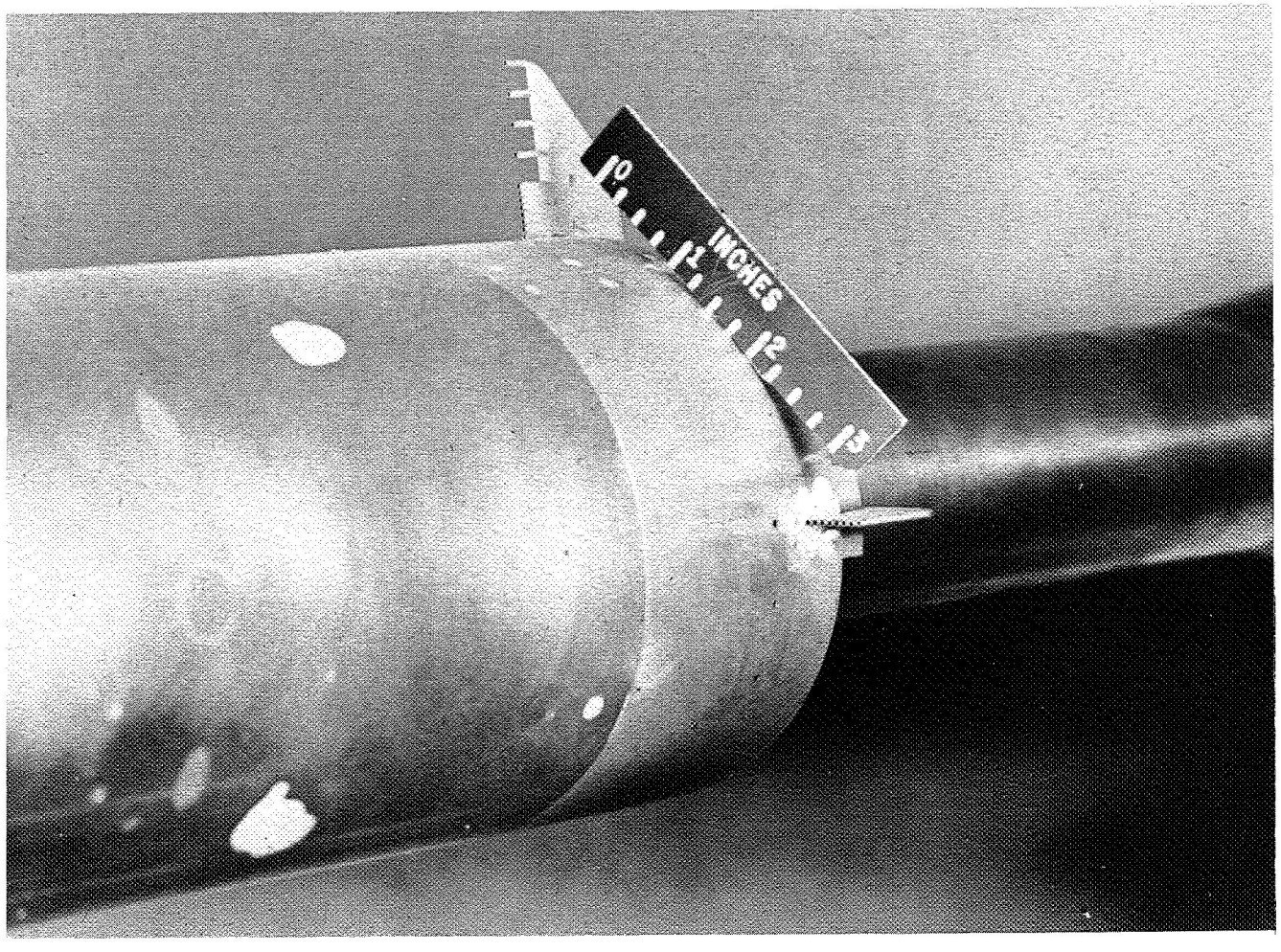
(b) Nose I attached to model and left to right noses IV, V, II, and III. L-57-3068

Figure 2.- Continued.



(c) Nose boundary-layer rakes installed on nose I. L-57-3069

Figure 2.- Continued.



(d) Base boundary-layer rakes. L-57-3070

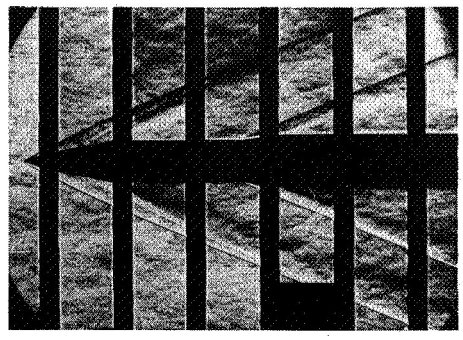
Figure 2.- Concluded.

[redacted]

M=1.57

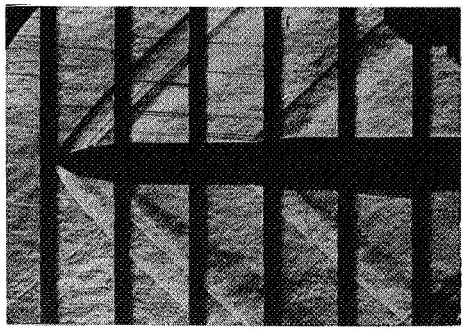
(a) Nose I, natural transition.

M=1.57

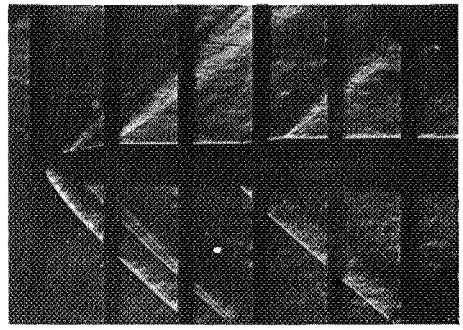


M=2.98

(b) Nose I, fixed transition.



M=1.57



M=1.57

L-58-135a

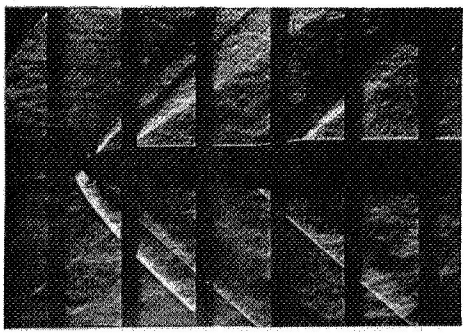
(c) Nose II, natural transition.

(d) Nose II, fixed transition.

Figure 3.- Typical schlieren photographs of a model of an intercontinental ballistic missile.

[redacted]

[redacted]



M=1.57

M=2.29

M=2.98

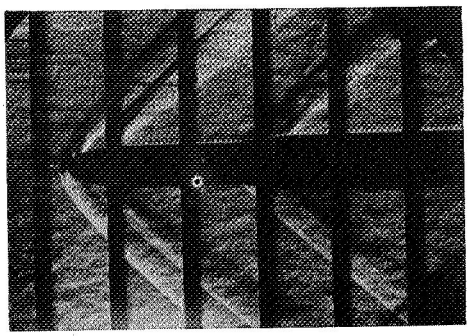
M=3.96

M=4.65

(e) Nose III, natural transition. L-58-136a

Figure 3.- Continued.

[redacted]

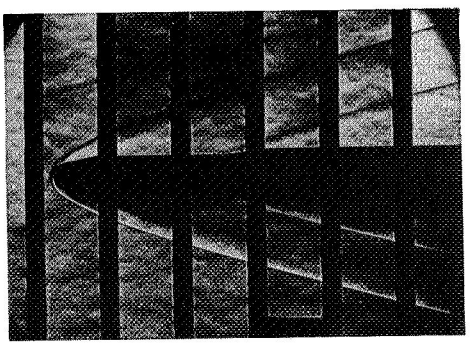


M=1.57

M=2.29

M=2.98

M=3.96

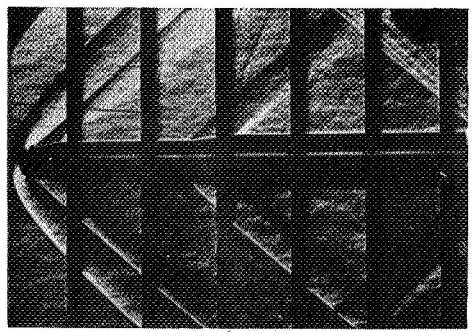


M=4.65

(f) Nose III, fixed transition. L-58-137a

Figure 3.- Continued.

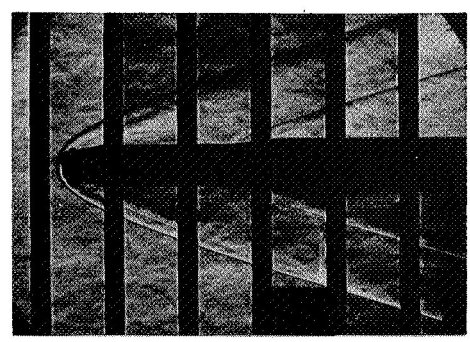
[redacted]



M=1.57

M=2.29

M=2.98



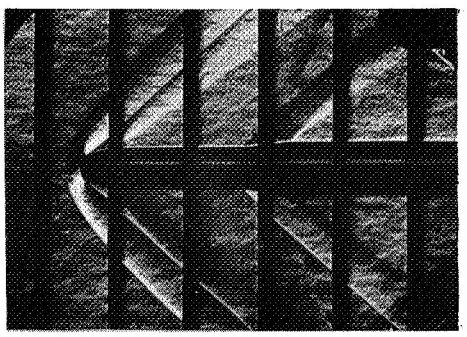
M=3.96

M=4.65

(g) Nose IV, natural transition. L-58-138a

Figure 3.- Continued.

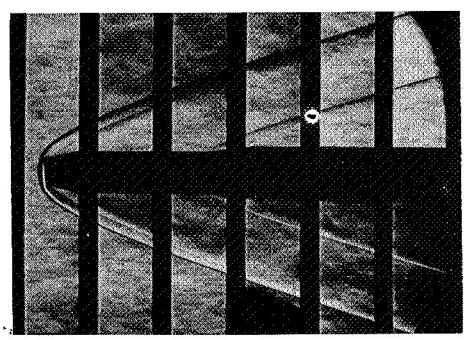
[redacted]



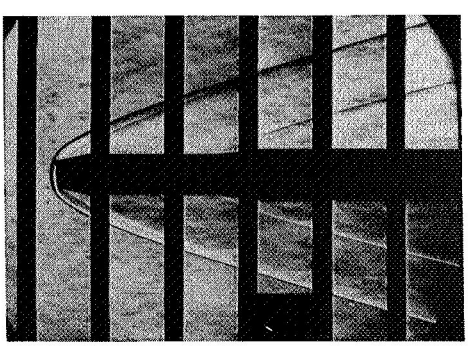
M=1.57

M=2.29

M=2.98



M=3.96



M=4.65

(h) Nose V, natural transition. L-58-139a

Figure 3.- Concluded.

[redacted]

[redacted]